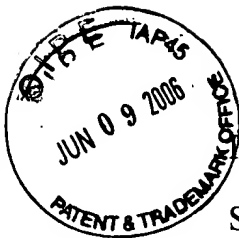


IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re application of Thomas GINGERAS et al.

Examiner: C. B. Wilder

Serial No.: 09/285,306

Art Unit: 1637

Filed: April 2, 1999

Confirmation No.: 3558

For: MYCOBACTERIAL RPOB SEQUENCES

Commissioner for Patents  
Customer Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

REPLY TO INTERVIEW SUMMARY

In response to the Interview Summary dated June 8, 2006, submitted herewith is a replacement version of Table 1. The table has been corrected to replace material that was not legible or cut-off. No prohibited new matter has been added.

Respectfully submitted,

COOLEY GODWARD LLP

Dated: June 9, 2006

By:

Bonnie Weiss McLeod

Reg. No. 43,255

**CUSTOMER NO. 000033522**

COOLEY GODWARD LLP

ATTN: Patent Group

The Bowen Building

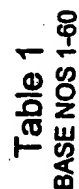
875 15<sup>th</sup> Street, NW

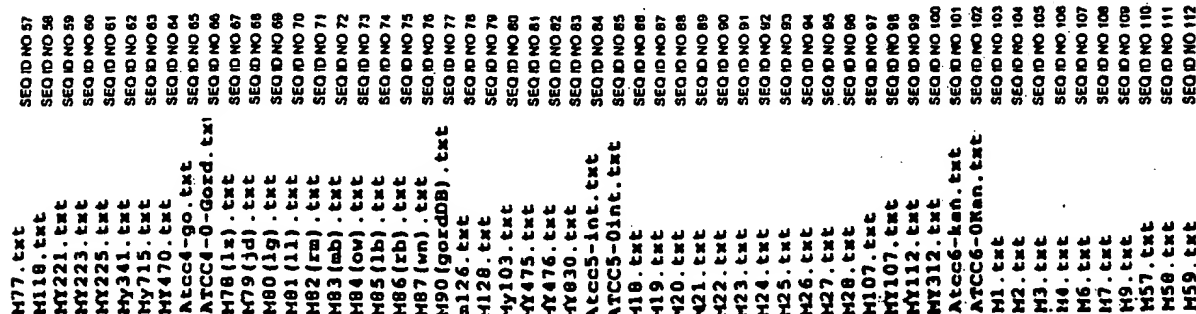
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Fax: (202) 842-7899

18

[illegible]

[illegible]



Table 1  
BASE NOS 1-60

M38.txt	SEQ ID NO 169	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M39.txt	SEQ ID NO 170	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M40.txt	SEQ ID NO 171	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M41.txt	SEQ ID NO 172	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M42.txt	SEQ ID NO 173	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M43.txt	SEQ ID NO 174	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M44.txt	SEQ ID NO 175	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M45.txt	SEQ ID NO 176	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M46.txt	SEQ ID NO 177	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M47.txt	SEQ ID NO 178	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M48 (May6).txt	SEQ ID NO 179	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M49.txt	SEQ ID NO 180	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG
M56 (May4).txt	SEQ ID NO 181	CCCA	GGAC	CGT	GGAG	GGCG	GAT	CACA	CCGC	AGAC	TT	GGAT	CAAC	ACAT	CCG	GT	GGT	GGCG	GG

## Table 1

ATCC9-Mtb.txt	SEQ ID NO 1
M621.txt	SEQ ID NO 2
Atcc1-sv.txt	SEQ ID NO 3
M29.txt	SEQ ID NO 4
M30.txt	SEQ ID NO 5
M31.txt	SEQ ID NO 6
M32.txt	SEQ ID NO 7
M33.txt	SEQ ID NO 8
M34.txt	SEQ ID NO 9
M48-nov.txt	SEQ ID NO 10
M49.txt	SEQ ID NO 11
M64 (Nov2) - .txt	SEQ ID NO 12
M65 (Nov3) .txt	SEQ ID NO 13
M67 (Nov5) - .txt	SEQ ID NO 14
M69 (Nov7) .txt	SEQ ID NO 15
M71 (Nov9) .txt	SEQ ID NO 16
M91 .txt	SEQ ID NO 17
M94 .txt	SEQ ID NO 18
M95 .txt	SEQ ID NO 19
M96 .txt	SEQ ID NO 20
M100 .txt	SEQ ID NO 21
M101 .txt	SEQ ID NO 22
M102 .txt	SEQ ID NO 23
M104 .txt	SEQ ID NO 24
M105 .txt	SEQ ID NO 25
M106 .txt	SEQ ID NO 26
MY111 .txt	SEQ ID NO 27
M76 .txt	SEQ ID NO 28
MY451 .txt	SEQ ID NO 29
ATCC2-choleNov.txt	SEQ ID NO 30
M10 .txt	SEQ ID NO 31
M11-662 .txt	SEQ ID NO 32
M12 .txt	SEQ ID NO 33
M13 2_662 .txt	SEQ ID NO 34
M14 .txt	SEQ ID NO 35
M15 .txt	SEQ ID NO 36
M16 .txt	SEQ ID NO 37
M17 2_662 .txt	SEQ ID NO 38
M50 .txt	SEQ ID NO 39
M51 .txt	SEQ ID NO 40
M15 .txt	SEQ ID NO 41
M16 .txt	SEQ ID NO 42
M19 .txt	SEQ ID NO 43
M109 .txt	SEQ ID NO 44
MY200 .txt	SEQ ID NO 45
MY207 .txt	SEQ ID NO 46
MY209 .txt	SEQ ID NO 47
M122 .txt	SEQ ID NO 48
M123 .txt	SEQ ID NO 49
M124 .txt	SEQ ID NO 50
Atcc3-for .txt	SEQ ID NO 51
M3 .txt	SEQ ID NO 52
M54 .txt	SEQ ID NO 53
M55 .txt	SEQ ID NO 54
M56 .txt	SEQ ID NO 55
M74 (Nov12) .txt	SEQ ID NO 56

# Table 1

[illegible]

## Table 1

SEQ ID NO 113	My160. txt
SEQ ID NO 114	My161. txt
SEQ ID NO 115	My162. txt
SEQ ID NO 116	My106. txt
SEQ ID NO 117	My216. txt
SEQ ID NO 118	My218. txt
SEQ ID NO 119	My226. txt
SEQ ID NO 120	My109. txt
SEQ ID NO 121	My111. txt
SEQ ID NO 122	My112. txt
SEQ ID NO 123	My113. txt
SEQ ID NO 124	My114. txt
SEQ ID NO 125	My325. txt
SEQ ID NO 126	My178. txt
SEQ ID NO 127	My214. txt
SEQ ID NO 128	My224. txt
SEQ ID NO 129	My244. txt
SEQ ID NO 130	My339. txt
SEQ ID NO 131	My343. txt
SEQ ID NO 132	My458. txt
SEQ ID NO 133	My809. txt
SEQ ID NO 134	My1817. txt
SEQ ID NO 135	My821. txt
SEQ ID NO 136	My824. txt
SEQ ID NO 137	My102. txt
SEQ ID NO 138	My105. txt
SEQ ID NO 139	My251. txt
SEQ ID NO 140	My256. txt
SEQ ID NO 141	My294. txt
SEQ ID NO 142	My354. txt
SEQ ID NO 143	Atcc7-secr. txt
SEQ ID NO 144	ATCC7-06cr. txt
SEQ ID NO 145	My121. txt
SEQ ID NO 146	My249. txt
SEQ ID NO 147	My372. txt
SEQ ID NO 148	My378. txt
SEQ ID NO 149	My484. txt
SEQ ID NO 150	My556. txt
SEQ ID NO 151	My563. txt
SEQ ID NO 152	My586. txt
SEQ ID NO 153	Atcc8-ams. txt
SEQ ID NO 154	My35. txt
SEQ ID NO 155	My36. txt
SEQ ID NO 156	My37. txt
SEQ ID NO 157	m125. txt
SEQ ID NO 158	My143. txt
SEQ ID NO 159	My104. txt
SEQ ID NO 160	My196. txt
SEQ ID NO 161	My357. txt
SEQ ID NO 162	My358. txt
SEQ ID NO 163	My480. txt
SEQ ID NO 164	My212. txt
SEQ ID NO 165	My491. txt
SEQ ID NO 166	My497. txt
SEQ ID NO 167	My816. txt
SEQ ID NO 168	Atcc10-xen. txt



Table 1  
BASE NOS 61-120

M38. txt	SEQ ID NO 169	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT	70	80	90	100	110	120
M39. txt	SEQ ID NO 170	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M40. txt	SEQ ID NO 171	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M41. txt	SEQ ID NO 172	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M42. txt	SEQ ID NO 173	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M43. txt	SEQ ID NO 174	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M44. txt	SEQ ID NO 175	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M45. txt	SEQ ID NO 176	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M46. txt	SEQ ID NO 177	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M47. txt	SEQ ID NO 178	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M48 (Mar6). txt	SEQ ID NO 179	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M49. txt	SEQ ID NO 180	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						
M56 (Mar4). txt	SEQ ID NO 181	CGATCAAGGAGTTCCTTCGGCACCAAGCCAGCT						

## Table 1

**Figure 6.** Amino acid sequence alignment of the deduced amino acid sequences of the three proteins. The amino acid sequence of the deduced protein from the cDNA library was aligned with those of the two known proteins. The alignment was performed using the ClustalW program. The gaps were indicated by dashes (-). The conserved regions are boxed. The scale bar indicates the distance between the two sequences. The numbers at the bottom indicate the position of each amino acid in the sequence.

## Table 1

M77.txt  
M781.txt  
M721.txt  
M722.txt  
M723.txt  
M725.txt  
M731.txt  
M734.txt  
M715.txt  
M740.txt  
Atcc6-go.txt  
ATCC4-O-Gord.txt  
M78(1st).txt  
M79(jd).txt  
M80(1g).txt  
M81(1l).txt  
M82(rn).txt  
M83(mb).txt  
M83(ow).txt  
M83(1b).txt  
M86(rb).txt  
M87(wml).txt  
H90(gordB).txt  
m126.txt  
M128.txt  
Myl03.txt  
Myl07.txt  
Myl475.txt  
Myl476.txt  
Myl830.txt  
Atcc5-int.txt  
ATCC5-Oint.txt  
M118.txt  
M119.txt  
M120.txt  
M121.txt  
M122.txt  
M123.txt  
M124.txt  
M125.txt  
M126.txt  
M127.txt  
M128.txt  
M107.txt  
M107.txt  
M112.txt  
M1312.txt  
Atcc6-han.txt  
ATCC6-Okan.txt  
M1.txt  
M2.txt  
M3.txt  
H4.txt  
M6.txt  
M7.txt  
M9.txt  
M57.txt  
M58.txt  
M59.txt

[illegible]

## Table 1

M60.txt	SEQ ID NO 113
M61.txt	SEQ ID NO 114
M62.txt	SEQ ID NO 115
MY106.txt	SEQ ID NO 116
MY216.txt	SEQ ID NO 117
MY210.txt	SEQ ID NO 118
MY226.txt	SEQ ID NO 119
M109.txt	SEQ ID NO 120
M111.txt	SEQ ID NO 121
M112.txt	SEQ ID NO 122
M113.txt	SEQ ID NO 123
M114.txt	SEQ ID NO 124
MY325.txt	SEQ ID NO 125
MY710.txt	SEQ ID NO 126
MY214.txt	SEQ ID NO 127
MY224.txt	SEQ ID NO 128
MY244.txt	SEQ ID NO 129
MY339.txt	SEQ ID NO 130
MY343.txt	SEQ ID NO 131
MY809.txt	SEQ ID NO 132
MY817.txt	SEQ ID NO 133
MY821.txt	SEQ ID NO 134
MY824.txt	SEQ ID NO 135
MY102.txt	SEQ ID NO 136
MY105.txt	SEQ ID NO 137
MY251.txt	SEQ ID NO 138
MY256.txt	SEQ ID NO 139
MY294.txt	SEQ ID NO 140
MY354.txt	SEQ ID NO 141
Atcc7-scr.txt	SEQ ID NO 142
ATCC7-06cf.txt	SEQ ID NO 143
MY121.txt	SEQ ID NO 144
MY249.txt	SEQ ID NO 145
MY372.txt	SEQ ID NO 146
MY378.txt	SEQ ID NO 147
MY484.txt	SEQ ID NO 148
MY556.txt	SEQ ID NO 149
MY563.txt	SEQ ID NO 150
MY586.txt	SEQ ID NO 151
Atcc8-amo.txt	SEQ ID NO 152
M35.txt	SEQ ID NO 153
M36.txt	SEQ ID NO 154
M37.txt	SEQ ID NO 155
M125.txt	SEQ ID NO 156
MY143.txt	SEQ ID NO 157
MY104.txt	SEQ ID NO 158
MY196.txt	SEQ ID NO 159
MY357.txt	SEQ ID NO 160
MY358.txt	SEQ ID NO 161
MY480.txt	SEQ ID NO 162
MY212.txt	SEQ ID NO 163
MY491.txt	SEQ ID NO 164
MY497.txt	SEQ ID NO 165
MY816.txt	SEQ ID NO 166
Atcc10-sen.txt	SEQ ID NO 167

[illegible]

Table 1  
BASE NOS 121-180

M38. txt	SEQ ID NO 169	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	130
M39. txt	SEQ ID NO 170	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	140
M40. txt	SEQ ID NO 171	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	150
M41. txt	SEQ ID NO 172	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	160
M42. txt	SEQ ID NO 173	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	170
M43. txt	SEQ ID NO 174	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	180
M44. txt	SEQ ID NO 175	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	190
M45. txt	SEQ ID NO 176	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	200
M46. txt	SEQ ID NO 177	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	210
M47. txt	SEQ ID NO 178	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	220
M48 (Nav6). txt	SEQ ID NO 179	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	230
M49. txt	SEQ ID NO 180	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	240
M56 (Nav4). txt	SEQ ID NO 181	TGT CCGGGG	TACCCGACAAAGCG	CGCT	TCGGCGCT	GG	CC	GGCGGGT	CTGT	CGCG	250

Table 1  
BASE NOS 181-240

ATCC9-Mib.txt	SEQ ID NO 1	AGCGTGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY621.txt	SEQ ID NO 2	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
Atcc1-av.txt	SEQ ID NO 3	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M29.txt	SEQ ID NO 4	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M30.txt	SEQ ID NO 5	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M31.txt	SEQ ID NO 6	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M32.txt	SEQ ID NO 7	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M33.txt	SEQ ID NO 8	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M34.txt	SEQ ID NO 9	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M48-new.txt	SEQ ID NO 10	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M49.txt	SEQ ID NO 11	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M64(Mav2).txt	SEQ ID NO 12	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M65(Mav3).txt	SEQ ID NO 13	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M67(Mav5).txt	SEQ ID NO 14	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M69(Mav7).txt	SEQ ID NO 15	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M71(Mav9).txt	SEQ ID NO 16	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M91.txt	SEQ ID NO 17	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M94.txt	SEQ ID NO 18	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M95.txt	SEQ ID NO 19	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M96.txt	SEQ ID NO 20	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M100.txt	SEQ ID NO 21	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M101.txt	SEQ ID NO 22	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M102.txt	SEQ ID NO 23	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M104.txt	SEQ ID NO 24	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M105.txt	SEQ ID NO 25	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M106.txt	SEQ ID NO 26	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY111.txt	SEQ ID NO 27	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M76.txt	SEQ ID NO 28	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY451.txt	SEQ ID NO 29	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
ATCC2-cholesterol.txt	SEQ ID NO 30	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M10.txt	SEQ ID NO 31	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M11-662.txt	SEQ ID NO 32	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M12.txt	SEQ ID NO 33	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M13-2-662.txt	SEQ ID NO 34	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M14.txt	SEQ ID NO 35	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M15.txt	SEQ ID NO 36	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M16.txt	SEQ ID NO 37	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M17-2-662.txt	SEQ ID NO 38	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M50.txt	SEQ ID NO 39	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M51.txt	SEQ ID NO 40	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M115.txt	SEQ ID NO 41	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M116.txt	SEQ ID NO 42	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M119.txt	SEQ ID NO 43	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY109.txt	SEQ ID NO 44	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY200.txt	SEQ ID NO 45	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY207.txt	SEQ ID NO 46	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
MY209.txt	SEQ ID NO 47	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M122.txt	SEQ ID NO 48	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M123.txt	SEQ ID NO 49	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M124.txt	SEQ ID NO 50	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
Atcc3-for.txt	SEQ ID NO 51	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M53.txt	SEQ ID NO 52	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M54.txt	SEQ ID NO 53	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M55.txt	SEQ ID NO 54	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M56.txt	SEQ ID NO 55	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA
M74(Mav12).txt	SEQ ID NO 56	AGCGGGCGGGGCTGGAGGTCCGCGACGTCGACCGGTCGACCTACGGCCGGATGTGCCCGA

Table 1  
BASE NOS 181-240

M77.txt	SEQID NO 57	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M118.txt	SEQID NO 58	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7221.txt	SEQID NO 59	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7223.txt	SEQID NO 60	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7225.txt	SEQID NO 61	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7341.txt	SEQID NO 62	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7715.txt	SEQID NO 63	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7470.txt	SEQID NO 64	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
Atcc4-GO.txt	SEQID NO 65	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
ATCC4-0-Gord.txt	SEQID NO 66	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M78(1x).txt	SEQID NO 67	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M79(jd).txt	SEQID NO 68	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M80(lg).txt	SEQID NO 69	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M81(11).txt	SEQID NO 70	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M82(em).txt	SEQID NO 71	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M83(mb).txt	SEQID NO 72	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M84(ow).txt	SEQID NO 73	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M85(lb).txt	SEQID NO 74	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M86(rb).txt	SEQID NO 75	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M87(wm).txt	SEQID NO 76	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M90(gordDB).txt	SEQID NO 77	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
m126.txt	SEQID NO 78	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M128.txt	SEQID NO 79	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M103.txt	SEQID NO 80	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7475.txt	SEQID NO 81	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7476.txt	SEQID NO 82	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7830.txt	SEQID NO 83	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
Atcc5-int.txt	SEQID NO 84	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
ATCC5-0int.txt	SEQID NO 85	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M18.txt	SEQID NO 86	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M19.txt	SEQID NO 87	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M20.txt	SEQID NO 88	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M21.txt	SEQID NO 89	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M22.txt	SEQID NO 90	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M23.txt	SEQID NO 91	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M24.txt	SEQID NO 92	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M25.txt	SEQID NO 93	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M26.txt	SEQID NO 94	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M27.txt	SEQID NO 95	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M28.txt	SEQID NO 96	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M107.txt	SEQID NO 97	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M107.txt	SEQID NO 98	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M1112.txt	SEQID NO 99	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7312.txt	SEQID NO 100	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
Atcc6-Kan.txt	SEQID NO 101	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
ATCC6-0Kan.txt	SEQID NO 102	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M1.txt	SEQID NO 103	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M2.txt	SEQID NO 104	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M3.txt	SEQID NO 105	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M4.txt	SEQID NO 106	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M5.txt	SEQID NO 107	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M6.txt	SEQID NO 108	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M7.txt	SEQID NO 109	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M8.txt	SEQID NO 110	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M9.txt	SEQID NO 111	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA
M10.txt	SEQID NO 112	AGCGTGC	CT	GAGGTCCGCGACGCTGCACTACGGCCCGGATGTGTGCCCGGA



## Table 1

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SEQ ID NO 117
SEQ ID NO 118
SEQ ID NO 119
SEQ ID NO 120
SEQ ID NO 121
SEQ ID NO 122
SEQ ID NO 123
SEQ ID NO 124
SEQ ID NO 125
SEQ ID NO 126
SEQ ID NO 127
SEQ ID NO 128
SEQ ID NO 129
SEQ ID NO 130
SEQ ID NO 131
SEQ ID NO 132
SEQ ID NO 133
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SEQ ID NO 152
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SEQ ID NO 155
SEQ ID NO 156
SEQ ID NO 157
SEQ ID NO 158
SEQ ID NO 159
SEQ ID NO 160
SEQ ID NO 161
SEQ ID NO 162
SEQ ID NO 163
SEQ ID NO 164
SEQ ID NO 165
SEQ ID NO 166
SEQ ID NO 167
SEQ ID NO 168
Atcc10-xep.txt
M60.txt
M61.txt
M62.txt
MY106.txt
MY216.txt
MY218.txt
MY226.txt
MH109.txt
MH111.txt
MH112.txt
MH113.txt
MH114.txt
MY325.txt
MY718.txt
MY214.txt
MY224.txt
MY244.txt
MY339.txt
MY343.txt
MY458.txt
MY809.txt
MY817.txt
MY821.txt
MY824.txt
MY102.txt
MY251.txt
MY256.txt
MY294.txt
MY354.txt
ALCCG7-SCE.txt
ATCC7-OSCF.txt
MY121.txt
MY249.txt
MY372.txt
MY378.txt
MY484.txt
MY556.txt
MY563.txt
MY586.txt
Atcc8-smo.txt
M35.txt
M36.txt
M37.txt
MY243.txt
MY143.txt
My104.txt
MY196.txt
MY357.txt
My358.txt
My480.txt
MY212.txt
MY491.txt
MY497.txt
MY816.txt

```



Table 1  
BASE NOS 181-240

M38.txt	SEQ ID NO 169	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	210
M39.txt	SEQ ID NO 170	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	220
M40.txt	SEQ ID NO 171	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	230
M41.txt	SEQ ID NO 172	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	240
M42.txt	SEQ ID NO 173	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	250
M43.txt	SEQ ID NO 174	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	260
M44.txt	SEQ ID NO 175	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	270
M45.txt	SEQ ID NO 176	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	280
M46.txt	SEQ ID NO 177	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	290
M47.txt	SEQ ID NO 178	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	300
M48 (May6).txt	SEQ ID NO 179	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	310
M49.txt	SEQ ID NO 180	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	320
M50 (May4).txt	SEQ ID NO 181	AGCG	GCGGGGGCTGGAGGGTCCG	GACGTTGCAC	CG	CAGTACGGCCGGGATGTGCCCGA	330
							340
							350
							360
							370
							380
							390
							400
							410
							420
							430
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							870
							880
							890
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							910
							920
							930
							940
							950
							960
							970
							980
							990
							1000

## Table 1

[illegible]

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## Table 1

M77.txt	SEQ ID NO 57
M118.txt	SEQ ID NO 58
MY221.txt	SEQ ID NO 59
MY223.txt	SEQ ID NO 60
MY225.txt	SEQ ID NO 61
MY341.txt	SEQ ID NO 62
MY715.txt	SEQ ID NO 63
MY770.txt	SEQ ID NO 64
ATCC4-90.txt	SEQ ID NO 65
ATCC4-0-Gord.txt	SEQ ID NO 66
M78(1st).txt	SEQ ID NO 67
M79(1st).txt	SEQ ID NO 68
M80(1st).txt	SEQ ID NO 69
M81(1st).txt	SEQ ID NO 70
M82(1st).txt	SEQ ID NO 71
M83(1st).txt	SEQ ID NO 72
M84(1st).txt	SEQ ID NO 73
M85(1st).txt	SEQ ID NO 74
M86(1st).txt	SEQ ID NO 75
M87(1st).txt	SEQ ID NO 76
M90(gordDB).txt	SEQ ID NO 77
m126.txt	SEQ ID NO 78
M128.txt	SEQ ID NO 79
MY103.txt	SEQ ID NO 80
MY175.txt	SEQ ID NO 81
MY476.txt	SEQ ID NO 82
MY830.txt	SEQ ID NO 83
Atcc5-Int.txt	SEQ ID NO 84
ATCC5-0Int.txt	SEQ ID NO 85
M18.txt	SEQ ID NO 86
M19.txt	SEQ ID NO 87
M20.txt	SEQ ID NO 88
M21.txt	SEQ ID NO 89
M22.txt	SEQ ID NO 90
M23.txt	SEQ ID NO 91
M24.txt	SEQ ID NO 92
M25.txt	SEQ ID NO 93
M26.txt	SEQ ID NO 94
M27.txt	SEQ ID NO 95
M28.txt	SEQ ID NO 96
M107.txt	SEQ ID NO 97
MY107.txt	SEQ ID NO 98
MY112.txt	SEQ ID NO 99
MY312.txt	SEQ ID NO 100
Atcc6-kan.txt	SEQ ID NO 101
ATCC6-0kan.txt	SEQ ID NO 102
M1.txt	SEQ ID NO 103
M2.txt	SEQ ID NO 104
M3.txt	SEQ ID NO 105
M4.txt	SEQ ID NO 106
M6.txt	SEQ ID NO 107
M7.txt	SEQ ID NO 108
M9.txt	SEQ ID NO 109
M57.txt	SEQ ID NO 110
M58.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

## Table 1

SEQ ID NO 113	M60.txt
SEQ ID NO 114	M61.txt
SEQ ID NO 115	M62.txt
SEQ ID NO 116	MY106.txt
SEQ ID NO 117	MY218.txt
SEQ ID NO 118	MY216.txt
SEQ ID NO 119	MY226.txt
SEQ ID NO 120	M109.txt
SEQ ID NO 121	M111.txt
SEQ ID NO 122	M112.txt
SEQ ID NO 123	M113.txt
SEQ ID NO 124	M114.txt
SEQ ID NO 125	MY325.txt
SEQ ID NO 126	MY718.txt
SEQ ID NO 127	MY214.txt
SEQ ID NO 128	MY224.txt
SEQ ID NO 129	MY244.txt
SEQ ID NO 130	My339.txt
SEQ ID NO 131	My343.txt
SEQ ID NO 132	MY458.txt
SEQ ID NO 133	MY809.txt
SEQ ID NO 134	MY817.txt
SEQ ID NO 135	MY821.txt
SEQ ID NO 136	MY824.txt
SEQ ID NO 137	MY102.txt
SEQ ID NO 138	MY105.txt
SEQ ID NO 139	MY251.txt
SEQ ID NO 140	My256.txt
SEQ ID NO 141	My294.txt
SEQ ID NO 142	MY354.txt
SEQ ID NO 143	AACC7-accr.txt
SEQ ID NO 144	MYCC7-Oaccr.txt
SEQ ID NO 145	MY121.txt
SEQ ID NO 146	MY249.txt
SEQ ID NO 147	MY372.txt
SEQ ID NO 148	MY378.txt
SEQ ID NO 149	MY484.txt
SEQ ID NO 150	My556.txt
SEQ ID NO 151	MY563.txt
SEQ ID NO 152	MY586.txt
SEQ ID NO 153	AACC8-smo.txt
SEQ ID NO 154	MY35.ttxt
SEQ ID NO 155	MY36.txt
SEQ ID NO 156	MY37.txt
SEQ ID NO 157	m125.txt
SEQ ID NO 158	MY143.txt
SEQ ID NO 159	MY104.txt
SEQ ID NO 160	MY196.txt
SEQ ID NO 161	MY357.txt
SEQ ID NO 162	MY358.txt
SEQ ID NO 163	MY480.txt
SEQ ID NO 164	MY212.txt
SEQ ID NO 165	MY491.txt
SEQ ID NO 166	MY497.txt
SEQ ID NO 167	MY816.txt
SEQ ID NO 168	atcc10-ren.txt

Table 1  
BASE NOS 241-300

M38. txt	SEQ ID NO 169	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	300
M39. txt	SEQ ID NO 170	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M40. txt	SEQ ID NO 171	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M41. txt	SEQ ID NO 172	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M42. txt	SEQ ID NO 173	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M43. txt	SEQ ID NO 174	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M44. txt	SEQ ID NO 175	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M45. txt	SEQ ID NO 176	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M46. txt	SEQ ID NO 177	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M47. txt	SEQ ID NO 178	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M48 (Nav6). txt	SEQ ID NO 179	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M49. txt	SEQ ID NO 180	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	
M56 (Nav4). txt	SEQ ID NO 181	TCGAAACGCCCGAGGGG	CCGAAACATCGGGT	TGATCGGGCTCGCTGT	CGGGTGTACGGCGCGGG	

## Table 1

SEQ ID NO 1	ATCC9-MCb.txt	SEQ ID NO 1
SEQ ID NO 2	MY621.txt	SEQ ID NO 2
SEQ ID NO 3	Atcc1-av.txt	SEQ ID NO 3
SEQ ID NO 4	M29.txt	SEQ ID NO 4
SEQ ID NO 5	M30.txt	SEQ ID NO 5
SEQ ID NO 6	M31.txt	SEQ ID NO 6
SEQ ID NO 7	M32.txt	SEQ ID NO 7
SEQ ID NO 8	M33.txt	SEQ ID NO 8
SEQ ID NO 9	M34.txt	SEQ ID NO 9
SEQ ID NO 10	M68-new.txt	SEQ ID NO 10
SEQ ID NO 11	M49.txt	SEQ ID NO 11
SEQ ID NO 12	M64 (May7).txt	SEQ ID NO 12
SEQ ID NO 13	M65 (May3).txt	SEQ ID NO 13
SEQ ID NO 14	M67 (May3).txt	SEQ ID NO 14
SEQ ID NO 15	M69 (May7).txt	SEQ ID NO 15
SEQ ID NO 16	M71 (May9).txt	SEQ ID NO 16
SEQ ID NO 17	M91.txt	SEQ ID NO 17
SEQ ID NO 18	M94.txt	SEQ ID NO 18
SEQ ID NO 19	M95.txt	SEQ ID NO 19
SEQ ID NO 20	M96.txt	SEQ ID NO 20
SEQ ID NO 21	M100.txt	SEQ ID NO 21
SEQ ID NO 22	M101.txt	SEQ ID NO 22
SEQ ID NO 23	M102.txt	SEQ ID NO 23
SEQ ID NO 24	M104.txt	SEQ ID NO 24
SEQ ID NO 25	M105.txt	SEQ ID NO 25
SEQ ID NO 26	M106.txt	SEQ ID NO 26
SEQ ID NO 27	M111.txt	SEQ ID NO 27
SEQ ID NO 28	M76.txt	SEQ ID NO 28
SEQ ID NO 29	MY451.txt	SEQ ID NO 29
SEQ ID NO 30	ATCC2-chelnew.txt	SEQ ID NO 30
SEQ ID NO 31	M10.txt	SEQ ID NO 31
SEQ ID NO 32	M11-662.txt	SEQ ID NO 32
SEQ ID NO 33	M112.txt	SEQ ID NO 33
SEQ ID NO 34	M113 2 662.txt	SEQ ID NO 34
SEQ ID NO 35	M114.txt	SEQ ID NO 35
SEQ ID NO 36	M15.txt	SEQ ID NO 36
SEQ ID NO 37	M16.txt	SEQ ID NO 37
SEQ ID NO 38	M17 2 662.txt	SEQ ID NO 38
SEQ ID NO 39	M50.txt	SEQ ID NO 39
SEQ ID NO 40	M51.txt	SEQ ID NO 40
SEQ ID NO 41	M115.txt	SEQ ID NO 41
SEQ ID NO 42	M116.txt	SEQ ID NO 42
SEQ ID NO 43	M119.txt	SEQ ID NO 43
SEQ ID NO 44	M109.txt	SEQ ID NO 44
SEQ ID NO 45	M122.txt	SEQ ID NO 45
SEQ ID NO 46	M207.txt	SEQ ID NO 46
SEQ ID NO 47	M209.txt	SEQ ID NO 47
SEQ ID NO 48	M123.txt	SEQ ID NO 48
SEQ ID NO 49	M124.txt	SEQ ID NO 49
SEQ ID NO 50	M124.txt	SEQ ID NO 50
SEQ ID NO 51	ATCC3-for.txt	SEQ ID NO 51
SEQ ID NO 52	M53.txt	SEQ ID NO 52
SEQ ID NO 53	M54.txt	SEQ ID NO 53
SEQ ID NO 54	M55.txt	SEQ ID NO 54
SEQ ID NO 55	M56.txt	SEQ ID NO 55
SEQ ID NO 56	M74 (May12).txt	SEQ ID NO 56

**BASE NOS 301-360**

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## Table 1

SEQ ID NO 113	SEQ ID NO 114	SEQ ID NO 115	SEQ ID NO 116	SEQ ID NO 117	SEQ ID NO 118	SEQ ID NO 119	SEQ ID NO 120	SEQ ID NO 121	SEQ ID NO 122	SEQ ID NO 123	SEQ ID NO 124	SEQ ID NO 125	SEQ ID NO 126	SEQ ID NO 127	SEQ ID NO 128	SEQ ID NO 129	SEQ ID NO 130	SEQ ID NO 131	SEQ ID NO 132	SEQ ID NO 133	SEQ ID NO 134	SEQ ID NO 135	SEQ ID NO 136	SEQ ID NO 137	SEQ ID NO 138	SEQ ID NO 139	SEQ ID NO 140	SEQ ID NO 141	SEQ ID NO 142	SEQ ID NO 143	SEQ ID NO 144	SEQ ID NO 145	SEQ ID NO 146	SEQ ID NO 147	SEQ ID NO 148	SEQ ID NO 149	SEQ ID NO 150	SEQ ID NO 151	SEQ ID NO 152	SEQ ID NO 153	SEQ ID NO 154	SEQ ID NO 155	SEQ ID NO 156	SEQ ID NO 157	SEQ ID NO 158	SEQ ID NO 159	SEQ ID NO 160	SEQ ID NO 161	SEQ ID NO 162	SEQ ID NO 163	SEQ ID NO 164	SEQ ID NO 165	SEQ ID NO 166	SEQ ID NO 167	SEQ ID NO 168
M60. txe	M61. txe	M62. txe	M106. txe	M216. txe	M218. txe	M226. txe	M109. txe	M111. txe	M112. txe	M113. txe	M114. txe	M325. txe	M718. txe	M224. txe	M244. txe	M339. txe	M343. txe	M7808. txe	M7817. txe	M7821. txe	M7824. txe	M7102. txe	M7105. txe	M7251. txe	M7256. txe	M7294. txe	M7354. txe	ATCGT-scr. txe	ATCGT-0scr. txe	M121. txe	M7249. txe	M7372. txe	M7378. txe	M7484. txe	M7556. txe	M7563. txe	M7586. txe	Atcc8-mm0. txe	M35. txe	M36. txe	M37. txe	m125. txe	M7143. txe	M7104. txe	M7196. txe	M7357. txe	M7358. txe	M7480. txe	M7212. txe	M7491. txe	M7497. txe	M7816. txe	Atcc10-m0a. txe		

[illegible]



Table 1  
BASE NOS 301-360

M38. txt	SEQ ID NO 168	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M39. txt	SEQ ID NO 170	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M40. txt	SEQ ID NO 171	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M41. txt	SEQ ID NO 172	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M42. txt	SEQ ID NO 173	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M43. txt	SEQ ID NO 174	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M44. txt	SEQ ID NO 175	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M45. txt	SEQ ID NO 176	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M46. txt	SEQ ID NO 177	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M47. txt	SEQ ID NO 178	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M48 (Nav6). txt	SEQ ID NO 179	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M49. txt	SEQ ID NO 180	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
M56 (Nav4). txt	SEQ ID NO 181	TCAACCCCGT	CGGGTTTCAT	GAGACGCC	TACCGCAAGGTGGT	CGGGCGTGGT	ACCGCGTGGT	ACCG
		310	320	330	340	350	360	

## Table 1

SEQ ID NO 1	ATCC9-MEb.txt	SEQ ID NO 1
SEQ ID NO 2	MY621.txt	SEQ ID NO 2
SEQ ID NO 3	ATCC1-av.txt	SEQ ID NO 3
SEQ ID NO 4	M29.txt	SEQ ID NO 4
SEQ ID NO 5	M30.txt	SEQ ID NO 5
SEQ ID NO 6	M31.txt	SEQ ID NO 6
SEQ ID NO 7	M32.txt	SEQ ID NO 7
SEQ ID NO 8	M33.txt	SEQ ID NO 8
SEQ ID NO 9	M34.txt	SEQ ID NO 9
SEQ ID NO 10	M48-new.txt	SEQ ID NO 10
SEQ ID NO 11	M49.txt	SEQ ID NO 11
SEQ ID NO 12	M66 (Mar2).txt	SEQ ID NO 12
SEQ ID NO 13	M165 (Mar3).txt	SEQ ID NO 13
SEQ ID NO 14	M67 (Mar5).txt	SEQ ID NO 14
SEQ ID NO 15	M69 (Mar7).txt	SEQ ID NO 15
SEQ ID NO 16	M71 (Mar9).txt	SEQ ID NO 16
SEQ ID NO 17	M91.txt	SEQ ID NO 17
SEQ ID NO 18	M94.txt	SEQ ID NO 18
SEQ ID NO 19	M95.txt	SEQ ID NO 19
SEQ ID NO 20	M96.txt	SEQ ID NO 20
SEQ ID NO 21	M100.txt	SEQ ID NO 21
SEQ ID NO 22	M101.txt	SEQ ID NO 22
SEQ ID NO 23	M102.txt	SEQ ID NO 23
SEQ ID NO 24	M104.txt	SEQ ID NO 24
SEQ ID NO 25	M105.txt	SEQ ID NO 25
SEQ ID NO 26	M106.txt	SEQ ID NO 26
SEQ ID NO 27	M111.txt	SEQ ID NO 27
SEQ ID NO 28	M76.txt	SEQ ID NO 28
SEQ ID NO 29	MY451.txt	SEQ ID NO 29
SEQ ID NO 30	ATCC2-chnlnew.txt	SEQ ID NO 30
SEQ ID NO 31	M10.txt	SEQ ID NO 31
SEQ ID NO 32	M11-662.txt	SEQ ID NO 32
SEQ ID NO 33	M12.txt	SEQ ID NO 33
SEQ ID NO 34	M13 2 662.txt	SEQ ID NO 34
SEQ ID NO 35	M17.txt	SEQ ID NO 35
SEQ ID NO 36	M15.txt	SEQ ID NO 36
SEQ ID NO 37	M16.txt	SEQ ID NO 37
SEQ ID NO 38	M17 2 662.txt	SEQ ID NO 38
SEQ ID NO 39	M50.txt	SEQ ID NO 39
SEQ ID NO 40	M51.txt	SEQ ID NO 40
SEQ ID NO 41	M115.txt	SEQ ID NO 41
SEQ ID NO 42	M116.txt	SEQ ID NO 42
SEQ ID NO 43	M119.txt	SEQ ID NO 43
SEQ ID NO 44	MY109.txt	SEQ ID NO 44
SEQ ID NO 45	MY200.txt	SEQ ID NO 45
SEQ ID NO 46	MY207.txt	SEQ ID NO 46
SEQ ID NO 47	MY209.txt	SEQ ID NO 47
SEQ ID NO 48	M122.txt	SEQ ID NO 48
SEQ ID NO 49	M123.txt	SEQ ID NO 49
SEQ ID NO 50	M124.txt	SEQ ID NO 50
SEQ ID NO 51	ATCC3-for.txt	SEQ ID NO 51
SEQ ID NO 52	M53.txt	SEQ ID NO 52
SEQ ID NO 53	M54.txt	SEQ ID NO 53
SEQ ID NO 54	M55.txt	SEQ ID NO 54
SEQ ID NO 55	M56.txt	SEQ ID NO 55
SEQ ID NO 56	M74 (Mar12).txt	SEQ ID NO 56

[illegible]

## Table 1

H77.txt	SEQ ID NO 57
H118.txt	SEQ ID NO 58
M721.txt	SEQ ID NO 59
M723.txt	SEQ ID NO 60
M725.txt	SEQ ID NO 61
M7341.txt	SEQ ID NO 62
M715.txt	SEQ ID NO 63
M7470.txt	SEQ ID NO 64
ATCC4-go.txt	SEQ ID NO 65
ATCC4-0-Gord.txt	SEQ ID NO 66
M78(1s).txt	SEQ ID NO 67
M79(jd).txt	SEQ ID NO 68
H80(lg).txt	SEQ ID NO 69
M81(11).txt	SEQ ID NO 70
M83(tm).txt	SEQ ID NO 71
M83(mb).txt	SEQ ID NO 72
M84(ow).txt	SEQ ID NO 73
M85(1b).txt	SEQ ID NO 74
H86(rfb).txt	SEQ ID NO 75
M87(wm).txt	SEQ ID NO 76
M90(gordDB).txt	SEQ ID NO 77
m126.txt	SEQ ID NO 78
H128.txt	SEQ ID NO 79
M103.txt	SEQ ID NO 80
M7475.txt	SEQ ID NO 81
M7476.txt	SEQ ID NO 82
M7830.txt	SEQ ID NO 83
ATCC5-int.txt	SEQ ID NO 84
ATCC5-Oint.txt	SEQ ID NO 85
H18.txt	SEQ ID NO 86
M19.txt	SEQ ID NO 87
M20.txt	SEQ ID NO 88
M21.txt	SEQ ID NO 89
M22.txt	SEQ ID NO 90
M23.txt	SEQ ID NO 91
M24.txt	SEQ ID NO 92
M25.txt	SEQ ID NO 93
M26.txt	SEQ ID NO 94
M27.txt	SEQ ID NO 95
M28.txt	SEQ ID NO 96
M107.txt	SEQ ID NO 97
M107.txt	SEQ ID NO 98
M112.txt	SEQ ID NO 99
M1312.txt	SEQ ID NO 100
ATCC6-kan.txt	SEQ ID NO 101
ATCC6-0Kan.txt	SEQ ID NO 102
M1.txt	SEQ ID NO 103
M2.txt	SEQ ID NO 104
M3.txt	SEQ ID NO 105
M4.txt	SEQ ID NO 106
M6.txt	SEQ ID NO 107
M7.txt	SEQ ID NO 108
M9.txt	SEQ ID NO 109
M57.txt	SEQ ID NO 110
M58.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

[illegible]

## Table 1

SEQ ID NO 113	Hy60.txt	SEQ ID NO 133	SEQ ID NO 143
SEQ ID NO 114	Hy61.txt	SEQ ID NO 134	SEQ ID NO 144
SEQ ID NO 115	Hy62.txt	SEQ ID NO 135	SEQ ID NO 145
SEQ ID NO 116	Hy106.txt	SEQ ID NO 136	SEQ ID NO 146
SEQ ID NO 117	Hy216.txt	SEQ ID NO 137	SEQ ID NO 147
SEQ ID NO 118	Hy218.txt	SEQ ID NO 138	SEQ ID NO 148
SEQ ID NO 119	Hy226.txt	SEQ ID NO 139	SEQ ID NO 149
SEQ ID NO 120	Hy109.txt	SEQ ID NO 140	SEQ ID NO 150
SEQ ID NO 121	Hy111.txt	SEQ ID NO 141	SEQ ID NO 151
SEQ ID NO 122	Hy112.txt	SEQ ID NO 142	SEQ ID NO 152
SEQ ID NO 123	Hy113.txt	SEQ ID NO 143	SEQ ID NO 153
SEQ ID NO 124	Hy114.txt	SEQ ID NO 144	SEQ ID NO 154
SEQ ID NO 125	Hy325.txt	SEQ ID NO 145	SEQ ID NO 155
SEQ ID NO 126	Hy325.txt	SEQ ID NO 146	SEQ ID NO 156
SEQ ID NO 127	Hy718.txt	SEQ ID NO 147	SEQ ID NO 157
SEQ ID NO 128	Hy224.txt	SEQ ID NO 148	SEQ ID NO 158
SEQ ID NO 129	Hy244.txt	SEQ ID NO 149	SEQ ID NO 159
SEQ ID NO 130	Hy339.txt	SEQ ID NO 150	SEQ ID NO 160
SEQ ID NO 131	Hy343.txt	SEQ ID NO 151	SEQ ID NO 161
SEQ ID NO 132	Hy459.txt	SEQ ID NO 152	SEQ ID NO 162
SEQ ID NO 133	Hy809.txt	SEQ ID NO 153	SEQ ID NO 163
SEQ ID NO 134	Hy817.txt	SEQ ID NO 154	SEQ ID NO 164
SEQ ID NO 135	Hy821.txt	SEQ ID NO 155	SEQ ID NO 165
SEQ ID NO 136	Hy824.txt	SEQ ID NO 156	SEQ ID NO 166
SEQ ID NO 137	Hy102.txt	SEQ ID NO 157	SEQ ID NO 167
SEQ ID NO 138	Hy105.txt	SEQ ID NO 158	SEQ ID NO 168
SEQ ID NO 139	Hy251.txt	SEQ ID NO 159	SEQ ID NO 169
SEQ ID NO 140	Hy256.txt	SEQ ID NO 160	SEQ ID NO 170
SEQ ID NO 141	Hy294.txt	SEQ ID NO 161	SEQ ID NO 171
SEQ ID NO 142	Hy354.txt	SEQ ID NO 162	SEQ ID NO 172
SEQ ID NO 143	Hy378.txt	SEQ ID NO 163	SEQ ID NO 173
SEQ ID NO 144	Hy484.txt	SEQ ID NO 164	SEQ ID NO 174
SEQ ID NO 145	Hy556.txt	SEQ ID NO 165	SEQ ID NO 175
SEQ ID NO 146	Hy563.txt	SEQ ID NO 166	SEQ ID NO 176
SEQ ID NO 147	Hy586.txt	SEQ ID NO 167	SEQ ID NO 177
SEQ ID NO 148	Hy372.txt	SEQ ID NO 168	SEQ ID NO 178
SEQ ID NO 149	Hy378.txt	SEQ ID NO 169	SEQ ID NO 179
SEQ ID NO 150	Hy484.txt	SEQ ID NO 170	SEQ ID NO 180
SEQ ID NO 151	Hy556.txt	SEQ ID NO 171	SEQ ID NO 181
SEQ ID NO 152	Hy563.txt	SEQ ID NO 172	SEQ ID NO 182
SEQ ID NO 153	Hy586.txt	SEQ ID NO 173	SEQ ID NO 183
SEQ ID NO 154	Hy372.txt	SEQ ID NO 174	SEQ ID NO 184
SEQ ID NO 155	Hy378.txt	SEQ ID NO 175	SEQ ID NO 185
SEQ ID NO 156	Hy484.txt	SEQ ID NO 176	SEQ ID NO 186
SEQ ID NO 157	Hy556.txt	SEQ ID NO 177	SEQ ID NO 187
SEQ ID NO 158	Hy563.txt	SEQ ID NO 178	SEQ ID NO 188
SEQ ID NO 159	Hy586.txt	SEQ ID NO 179	SEQ ID NO 189
SEQ ID NO 160	Hy372.txt	SEQ ID NO 180	SEQ ID NO 190
SEQ ID NO 161	Hy378.txt	SEQ ID NO 181	SEQ ID NO 191
SEQ ID NO 162	Hy484.txt	SEQ ID NO 182	SEQ ID NO 192
SEQ ID NO 163	Hy556.txt	SEQ ID NO 183	SEQ ID NO 193
SEQ ID NO 164	Hy563.txt	SEQ ID NO 184	SEQ ID NO 194
SEQ ID NO 165	Hy586.txt	SEQ ID NO 185	SEQ ID NO 195
SEQ ID NO 166	Hy372.txt	SEQ ID NO 186	SEQ ID NO 196
SEQ ID NO 167	Hy378.txt	SEQ ID NO 187	SEQ ID NO 197
SEQ ID NO 168	Hy484.txt	SEQ ID NO 188	SEQ ID NO 198
SEQ ID NO 169	Hy556.txt	SEQ ID NO 189	SEQ ID NO 199
SEQ ID NO 170	Hy563.txt	SEQ ID NO 190	SEQ ID NO 200
SEQ ID NO 171	Hy586.txt	SEQ ID NO 191	SEQ ID NO 201
SEQ ID NO 172	Hy372.txt	SEQ ID NO 192	SEQ ID NO 202
SEQ ID NO 173	Hy378.txt	SEQ ID NO 193	SEQ ID NO 203
SEQ ID NO 174	Hy484.txt	SEQ ID NO 194	SEQ ID NO 204
SEQ ID NO 175	Hy556.txt	SEQ ID NO 195	SEQ ID NO 205
SEQ ID NO 176	Hy563.txt	SEQ ID NO 196	SEQ ID NO 206
SEQ ID NO 177	Hy586.txt	SEQ ID NO 197	SEQ ID NO 207
SEQ ID NO 178	Hy372.txt	SEQ ID NO 198	SEQ ID NO 208
SEQ ID NO 179	Hy378.txt	SEQ ID NO 199	SEQ ID NO 209
SEQ ID NO 180	Hy484.txt	SEQ ID NO 200	SEQ ID NO 210
SEQ ID NO 181	Hy556.txt	SEQ ID NO 201	SEQ ID NO 211
SEQ ID NO 182	Hy563.txt	SEQ ID NO 202	SEQ ID NO 212
SEQ ID NO 183	Hy586.txt	SEQ ID NO 203	SEQ ID NO 213
SEQ ID NO 184	Hy372.txt	SEQ ID NO 204	SEQ ID NO 214
SEQ ID NO 185	Hy378.txt	SEQ ID NO 205	SEQ ID NO 215
SEQ ID NO 186	Hy484.txt	SEQ ID NO 206	SEQ ID NO 216
SEQ ID NO 187	Hy556.txt	SEQ ID NO 207	SEQ ID NO 217
SEQ ID NO 188	Hy563.txt	SEQ ID NO 208	SEQ ID NO 218
SEQ ID NO 189	Hy586.txt	SEQ ID NO 209	SEQ ID NO 219
SEQ ID NO 190	Hy372.txt	SEQ ID NO 210	SEQ ID NO 220
SEQ ID NO 191	Hy378.txt	SEQ ID NO 211	SEQ ID NO 221
SEQ ID NO 192	Hy484.txt	SEQ ID NO 212	SEQ ID NO 222
SEQ ID NO 193	Hy556.txt	SEQ ID NO 213	SEQ ID NO 223
SEQ ID NO 194	Hy563.txt	SEQ ID NO 214	SEQ ID NO 224
SEQ ID NO 195	Hy586.txt	SEQ ID NO 215	SEQ ID NO 225
SEQ ID NO 196	Hy372.txt	SEQ ID NO 216	SEQ ID NO 226
SEQ ID NO 197	Hy378.txt	SEQ ID NO 217	SEQ ID NO 227
SEQ ID NO 198	Hy484.txt	SEQ ID NO 218	SEQ ID NO 228
SEQ ID NO 199	Hy556.txt	SEQ ID NO 219	SEQ ID NO 229
SEQ ID NO 200	Hy563.txt	SEQ ID NO 220	SEQ ID NO 230
SEQ ID NO 201	Hy586.txt	SEQ ID NO 221	SEQ ID NO 231
SEQ ID NO 202	Hy372.txt	SEQ ID NO 222	SEQ ID NO 232
SEQ ID NO 203	Hy378.txt	SEQ ID NO 223	SEQ ID NO 233
SEQ ID NO 204	Hy484.txt	SEQ ID NO 224	SEQ ID NO 234
SEQ ID NO 205	Hy556.txt	SEQ ID NO 225	SEQ ID NO 235
SEQ ID NO 206	Hy563.txt	SEQ ID NO 226	SEQ ID NO 236
SEQ ID NO 207	Hy586.txt	SEQ ID NO 227	SEQ ID NO 237
SEQ ID NO 208	Hy372.txt	SEQ ID NO 228	SEQ ID NO 238
SEQ ID NO 209	Hy378.txt	SEQ ID NO 229	SEQ ID NO 239
SEQ ID NO 210	Hy484.txt	SEQ ID NO 230	SEQ ID NO 240
SEQ ID NO 211	Hy556.txt	SEQ ID NO 231	SEQ ID NO 241
SEQ ID NO 212	Hy563.txt	SEQ ID NO 232	SEQ ID NO 242
SEQ ID NO 213	Hy586.txt	SEQ ID NO 233	SEQ ID NO 243
SEQ ID NO 214	Hy372.txt	SEQ ID NO 234	SEQ ID NO 244
SEQ ID NO 215	Hy378.txt	SEQ ID NO 235	SEQ ID NO 245
SEQ ID NO 216	Hy484.txt	SEQ ID NO 236	SEQ ID NO 246
SEQ ID NO 217	Hy556.txt	SEQ ID NO 237	SEQ ID NO 247
SEQ ID NO 218	Hy563.txt	SEQ ID NO 238	SEQ ID NO 248
SEQ ID NO 219	Hy586.txt	SEQ ID NO 239	SEQ ID NO 249
SEQ ID NO 220	Hy372.txt	SEQ ID NO 240	SEQ ID NO 250
SEQ ID NO 221	Hy378.txt	SEQ ID NO 241	SEQ ID NO 251
SEQ ID NO 222	Hy484.txt	SEQ ID NO 242	SEQ ID NO 252
SEQ ID NO 223	Hy556.txt	SEQ ID NO 243	SEQ ID NO 253
SEQ ID NO 224	Hy563.txt	SEQ ID NO 244	SEQ ID NO 254
SEQ ID NO 225	Hy586.txt	SEQ ID NO 245	SEQ ID NO 255
SEQ ID NO 226	Hy372.txt	SEQ ID NO 246	SEQ ID NO 256
SEQ ID NO 227	Hy378.txt	SEQ ID NO 247	SEQ ID NO 257
SEQ ID NO 228	Hy484.txt	SEQ ID NO 248	SEQ ID NO 258
SEQ ID NO 229	Hy556.txt	SEQ ID NO 249	SEQ ID NO 259
SEQ ID NO 230	Hy563.txt	SEQ ID NO 250	SEQ ID NO 260
SEQ ID NO 231	Hy586.txt	SEQ ID NO 251	SEQ ID NO 261
SEQ ID NO 232	Hy372.txt	SEQ ID NO 252	SEQ ID NO 262
SEQ ID NO 233	Hy378.txt	SEQ ID NO 253	SEQ ID NO 263
SEQ ID NO 234	Hy484.txt	SEQ ID NO 254	SEQ ID NO 264
SEQ ID NO 235	Hy556.txt	SEQ ID NO 255	SEQ ID NO 265
SEQ ID NO 236	Hy563.txt	SEQ ID NO 256	SEQ ID NO 266
SEQ ID NO 237	Hy586.txt	SEQ ID NO 257	SEQ ID NO 267
SEQ ID NO 238	Hy372.txt	SEQ ID NO 258	SEQ ID NO 268
SEQ ID NO 239	Hy378.txt	SEQ ID NO 259	SEQ ID NO 269
SEQ ID NO 240	Hy484.txt	SEQ ID NO 260	SEQ ID NO 270
SEQ ID NO 241	Hy556.txt	SEQ ID NO 261	SEQ ID NO 271
SEQ ID NO 242	Hy563.txt	SEQ ID NO 262	SEQ ID NO 272
SEQ ID NO 243	Hy586.txt	SEQ ID NO 263	SEQ ID NO 273
SEQ ID NO 244	Hy372.txt	SEQ ID NO 264	SEQ ID NO 274
SEQ ID NO 245	Hy378.txt	SEQ ID NO 265	SEQ ID NO 275
SEQ ID NO 246	Hy484.txt	SEQ ID NO 266	SEQ ID NO 276
SEQ ID NO 247	Hy556.txt	SEQ ID NO 267	SEQ ID NO 277
SEQ ID NO 248	Hy563.txt	SEQ ID NO 268	SEQ ID NO 278
SEQ ID NO 249	Hy586.txt	SEQ ID NO 269	SEQ ID NO 279
SEQ ID NO 250	Hy372.txt	SEQ ID NO 270	SEQ ID NO 280
SEQ ID NO 251	Hy378.txt	SEQ ID NO 271	SEQ ID NO 281
SEQ ID NO 252	Hy484.txt	SEQ ID NO 272	SEQ ID NO 282
SEQ ID NO 253	Hy556.txt	SEQ ID NO 273	SEQ ID NO 283
SEQ ID NO 254	Hy563.txt	SEQ ID NO 274	SEQ ID NO 284
SEQ ID NO 255	Hy586.txt	SEQ ID NO 275	SEQ ID NO 285
SEQ ID NO 256	Hy372.txt	SEQ ID NO 276	SEQ ID NO 286
SEQ ID NO 257	Hy378.txt	SEQ ID NO 277	SEQ ID NO 287
SEQ ID NO 258	Hy484.txt	SEQ ID NO 278	SEQ ID NO 288
SEQ ID NO 259	Hy556.txt	SEQ ID NO 279	SEQ ID NO 289
SEQ ID NO 260	Hy563.txt	SEQ ID NO 280	SEQ ID NO 290
SEQ ID NO 261	Hy586.txt	SEQ ID NO 281	SEQ ID NO 291
SEQ ID NO 262	Hy372.txt	SEQ ID NO 282	SEQ ID NO 292
SEQ ID NO 263	Hy378.txt	SEQ ID NO 283	SEQ ID NO 293
SEQ ID NO 264	Hy484.txt	SEQ ID NO 284	SEQ ID NO 294
SEQ ID NO 265	Hy556.txt	SEQ ID NO 285	SEQ ID NO 295
SEQ ID NO 266	Hy563.txt	SEQ ID NO 286	SEQ ID NO 296
SEQ ID NO 267	Hy586.txt	SEQ ID NO 287	SEQ ID NO 297
SEQ ID NO 268	Hy372.txt	SEQ ID NO 288	SEQ ID NO 298
SEQ ID NO 269	Hy378.txt	SEQ ID NO 289	SEQ ID NO 299
SEQ ID NO 270	Hy484.txt	SEQ ID NO 290	SEQ ID NO 300
SEQ ID NO 271	Hy556.txt	SEQ ID NO 291	SEQ ID NO 301
SEQ ID NO 272	Hy563.txt	SEQ ID NO 292	SEQ ID NO 302
SEQ ID NO 273	Hy586.txt	SEQ ID NO 293	SEQ ID NO 303
SEQ ID NO 274	Hy372.txt	SEQ ID NO 294	SEQ ID NO 304
SEQ ID NO 275	Hy378.txt	SEQ ID NO 295	SEQ ID NO 305
SEQ ID NO 276	Hy484.txt	SEQ ID NO 296	SEQ ID NO 306
SEQ ID NO 277	Hy556.txt	SEQ ID NO 297	SEQ ID NO 307
SEQ ID NO 278	Hy563.txt	SEQ ID NO 298	SEQ ID NO 308
SEQ ID NO 279	Hy586.txt	SEQ ID NO 299	SEQ ID NO 309
SEQ ID NO 280	Hy372.txt	SEQ ID NO 300	SEQ ID NO 310
SEQ ID NO 281	Hy378.txt	SEQ ID NO 301	SEQ ID NO 311
SEQ ID NO 282	Hy484.txt	SEQ ID NO 302	SEQ ID NO 312
SEQ ID NO 283	Hy556.txt	SEQ ID NO 303	SEQ ID NO 313
SEQ ID NO 284	Hy563.txt	SEQ ID NO 304	SEQ ID NO 314
SEQ ID NO 285	Hy586.txt	SEQ ID NO 305	SEQ ID NO 315
SEQ ID NO 286	Hy372.txt	SEQ ID NO 306	SEQ ID NO 316
SEQ ID NO 287	Hy378.txt	SEQ ID NO 307	SEQ ID NO 317
SEQ ID NO 288	Hy484.txt	SEQ ID NO 308	SEQ ID NO 318
SEQ ID NO 289	Hy556.txt	SEQ ID NO 309	SEQ ID NO 319
SEQ ID NO 290	Hy563.txt	SEQ ID NO 310	SEQ ID NO 320
SEQ ID NO 291	Hy586.txt	SEQ ID NO 311	SEQ ID NO 321
SEQ ID NO 292	Hy372.txt	SEQ ID NO 312	SEQ ID NO 322
SEQ ID NO 293	Hy378.txt	SEQ ID NO 313	SEQ ID NO 323
SEQ ID NO 294	Hy484.txt	SEQ ID NO 314	SEQ ID NO 324
SEQ ID NO 295	Hy556.txt	SEQ ID NO 315	SEQ ID NO 325
SEQ ID NO 296	Hy563.txt	SEQ ID NO 316	SEQ ID NO 326
SEQ ID NO 297	Hy586.txt	SEQ ID NO 317	SEQ ID NO 327
SEQ ID NO 298	Hy372.txt	SEQ ID NO 318	SEQ ID NO 328
SEQ ID NO 299	Hy378.txt	SEQ ID NO 319	SEQ ID NO 329
SEQ ID NO 300	Hy484.txt	SEQ ID NO 320	SEQ ID NO 330
SEQ ID NO 301	Hy556.txt	SEQ ID NO 321	SEQ ID NO 331
SEQ ID NO 302	Hy563.txt	SEQ ID NO 322	SEQ ID NO 332
SEQ ID NO 303	Hy586.txt	SEQ ID NO 323	SEQ ID NO 333
SEQ ID NO 304	Hy372.txt	SEQ ID NO 324	SEQ ID NO 334
SEQ ID NO 305	Hy378.txt	SEQ ID NO 325	SEQ ID NO 335
SEQ ID NO 306	Hy484.txt	SEQ ID NO 326	SEQ ID NO 336
SEQ ID NO 307	Hy556.txt	SEQ ID NO 327	SEQ ID NO 337
SEQ ID NO 308	Hy563.txt	SEQ ID NO 328	SEQ ID NO 338
SEQ ID NO 309	Hy586.txt	SEQ ID NO 329	SEQ ID NO 339
SEQ ID NO 310	Hy372.txt	SEQ ID NO 330	SEQ ID NO 340
SEQ ID NO 311	Hy378.txt	SEQ ID NO 331	SEQ ID NO 341
SEQ ID NO 312	Hy484.txt	SEQ ID NO 332	SEQ ID NO 342
SEQ ID NO 313	Hy556.txt	SEQ ID NO 333	SEQ ID NO 343
SEQ ID NO 314	Hy563.txt	SEQ ID NO 334	SEQ ID NO 344
SEQ ID NO 315	Hy586.txt	SEQ ID NO 335	SEQ ID NO 345
SEQ ID NO 316	Hy372.txt	SEQ ID NO 336	SEQ ID NO 346
SEQ ID NO 317	Hy378.txt	SEQ ID NO 337	SEQ ID NO 347
SEQ ID NO 318	Hy484.txt	SEQ ID NO 338	SEQ ID NO 348
SEQ ID NO 319	Hy556.txt	SEQ ID NO 339	SEQ ID NO 349
SEQ ID NO 320	Hy563.txt	SEQ ID NO 340	SEQ ID NO 350
SEQ ID NO 321	Hy586.txt	SEQ ID NO 341	SEQ ID NO 351
SEQ ID NO 322	Hy372.txt	SEQ ID NO 342	SEQ ID NO 352
SEQ ID NO 323	Hy378.txt	SEQ ID NO 343	SEQ ID NO 353
SEQ ID NO 324	Hy484.txt	SEQ ID NO 344	SEQ ID NO 354
SEQ ID NO 325	Hy556.txt	SEQ ID NO 345	SEQ ID NO 355
SEQ ID NO 326	Hy563.txt	SEQ ID NO 346	SEQ ID NO 356
SEQ ID NO 327	Hy586.txt	SEQ ID NO 347	SEQ ID NO 357
SEQ ID NO 328	Hy372.txt	SEQ ID NO 348	SEQ ID NO 358
SEQ ID NO 329	Hy378.txt	SEQ ID NO 349	SEQ ID NO 359
SEQ ID NO 330	Hy484.txt	SEQ ID NO 350	SEQ ID NO 360
SEQ ID NO 331	Hy556.txt	SEQ ID NO 351	SEQ ID NO 361
SEQ ID NO 332	Hy563.txt	SEQ ID NO 352	SEQ ID NO 362
SEQ ID NO 333	Hy586.txt	SEQ ID NO 353	SEQ ID NO 363
SEQ ID NO 334	Hy372.txt	SEQ ID NO 354	SEQ ID NO 364
SEQ ID NO 335	Hy378.txt	SEQ ID NO 355	SEQ ID NO 365
SEQ ID NO 336	Hy484.txt	SEQ ID NO 356	SEQ ID NO 366
SEQ ID NO 337	Hy556.txt	SEQ ID NO 357	SEQ ID NO 367
SEQ ID NO 338	Hy563.txt	SEQ ID NO 358	SEQ ID NO 368
SEQ ID NO 339	Hy586.txt	SEQ ID NO 359	SEQ ID NO 369
SEQ ID NO 340	Hy372.txt	SEQ ID NO 360	SEQ ID NO 370
SEQ ID NO 341	Hy378.txt	SEQ ID NO 361	SEQ ID NO 371
SEQ ID NO 342	Hy484.txt	SEQ ID NO 362	SEQ ID NO 372
SEQ ID NO 343	Hy556.txt	SEQ ID NO 363	SEQ ID NO 373
SEQ ID NO 344	Hy563.txt	SEQ ID NO 364	SEQ ID NO 374
SEQ ID NO 345	Hy586.txt	SEQ ID NO 365	SEQ ID NO 375
SEQ ID NO 346	Hy372.txt	SEQ ID NO 366	SEQ ID NO 376
SEQ ID NO 347	Hy378.txt	SEQ ID NO 367	SEQ ID NO 377
SEQ ID NO 348	Hy484.txt	SEQ ID NO 368	SEQ ID NO 378
SEQ ID NO 349	Hy556.txt	SEQ ID NO 369	SEQ ID NO 379
SEQ ID NO 350	Hy563.txt	SEQ ID NO 370	SEQ ID NO 380
SEQ ID NO 351	Hy586.txt	SEQ ID NO 371	SEQ ID NO 381
SEQ ID NO 352	Hy372.txt	SEQ ID NO 372	SEQ ID NO 382
SEQ ID NO 353	Hy378.txt	SEQ ID NO 373	SEQ ID NO 383
SEQ ID NO 354	Hy484.txt	SEQ ID NO 374	SEQ ID NO 384
SEQ ID NO 355	Hy556.txt	SEQ ID NO 375	SEQ ID NO 385
SEQ ID NO 356	Hy563.txt	SEQ ID NO 376	SEQ ID NO 386
SEQ ID NO 357	Hy586.txt	SEQ ID NO 377	SEQ ID NO 387
SEQ ID NO 358	Hy372.txt	SEQ ID NO 378	SEQ ID NO 388
SEQ ID NO 359	Hy378.txt	SEQ ID NO 379	SEQ ID NO 389
SEQ ID NO 360	Hy484.txt	SEQ ID NO 380	

Table 1  
BASE NOS 361-420

M38. txt	SEQ ID NO 169	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M39. txt	SEQ ID NO 170	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M40. txt	SEQ ID NO 171	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M41. txt	SEQ ID NO 172	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M42. txt	SEQ ID NO 173	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M43. txt	SEQ ID NO 174	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M44. txt	SEQ ID NO 175	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M45. txt	SEQ ID NO 176	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M46. txt	SEQ ID NO 177	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M47. txt	SEQ ID NO 178	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M48 (May6). txt	SEQ ID NO 179	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M49. txt	SEQ ID NO 180	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
M56 (May4). txt	SEQ ID NO 181	ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCCA	GTGGTGGC	CAAGGCCAA	T		
		370	380	390	400	410	420

## Table 1

SEQIDNO 1	ATCC9-Hub.txt
SEQIDNO 2	MY621.txt
SEQIDNO 3	Atcc1-av.txt
SEQIDNO 4	MY29.txt
SEQIDNO 5	M30.txt
SEQIDNO 6	M31.txt
SEQIDNO 7	M32.txt
SEQIDNO 8	M33.txt
SEQIDNO 9	M34.txt
SEQIDNO 10	M48-new.txt
SEQIDNO 11	M49.txt
SEQIDNO 12	M64 (May2).txt
SEQIDNO 13	M65 (May3).txt
SEQIDNO 14	M67 (May5).txt
SEQIDNO 15	M69 (May7).txt
SEQIDNO 16	M71 (May9).txt
SEQIDNO 17	M91.txt
SEQIDNO 18	M94.txt
SEQIDNO 19	M95.txt
SEQIDNO 20	M96.txt
SEQIDNO 21	M100.txt
SEQIDNO 22	M101.txt
SEQIDNO 23	M102.txt
SEQIDNO 24	M104.txt
SEQIDNO 25	M105.txt
SEQIDNO 26	M106.txt
SEQIDNO 27	M111.txt
SEQIDNO 28	M76.txt
SEQIDNO 29	MY451.txt
SEQIDNO 30	ATCC2-chelnew.txt
SEQIDNO 31	M10.txt
SEQIDNO 32	M11-662.txt
SEQIDNO 33	M112.txt
SEQIDNO 34	M113 2 662.txt
SEQIDNO 35	M114.txt
SEQIDNO 36	M15.txt
SEQIDNO 37	M16.txt
SEQIDNO 38	M17 2 662.txt
SEQIDNO 39	M50.txt
SEQIDNO 40	M51.txt
SEQIDNO 41	M115.txt
SEQIDNO 42	M116.txt
SEQIDNO 43	M119.txt
SEQIDNO 44	MY109.txt
SEQIDNO 45	MY200.txt
SEQIDNO 46	MY207.txt
SEQIDNO 47	MY209.txt
SEQIDNO 48	M122.txt
SEQIDNO 49	M123.txt
SEQIDNO 50	M124.txt
SEQIDNO 51	Atcc3-for.txt
SEQIDNO 52	M53.txt
SEQIDNO 53	M54.txt
SEQIDNO 54	M55.txt
SEQIDNO 55	M56.txt
SEQIDNO 56	M74 (May12).txt

Table 1

[illegible]

Table 1  
BASE NOS 421-480

M60. txt	SEQ ID NO 113	CGCCCGATC
M61. txt	SEQ ID NO 114	CGCCCGATC
M62. txt	SEQ ID NO 115	CGCCCGATC
MY106. txt	SEQ ID NO 116	CGCCCGATC
MY216. txt	SEQ ID NO 117	CGCCCGATC
MY218. txt	SEQ ID NO 118	CGCCCGATC
MY226. txt	SEQ ID NO 119	CGCCCGATC
MY109. txt	SEQ ID NO 120	CGCCCGATC
MY111. txt	SEQ ID NO 121	CGCCCGATC
MY112. txt	SEQ ID NO 122	CGCCCGATC
MY113. txt	SEQ ID NO 123	CGCCCGATC
MY114. txt	SEQ ID NO 124	CGCCCGATC
MY325. txt	SEQ ID NO 125	CGCCCGATC
MY718. txt	SEQ ID NO 126	CGCCCGATC
MY214. txt	SEQ ID NO 127	CGCCCGATC
MY224. txt	SEQ ID NO 128	CGCCCGATC
MY244. txt	SEQ ID NO 129	CGCCCGATC
MY339. txt	SEQ ID NO 130	CGCCCGATC
MY343. txt	SEQ ID NO 131	CGCCCGATC
MY458. txt	SEQ ID NO 132	CGCCCGATC
MY809. txt	SEQ ID NO 133	CGCCCGATC
MY817. txt	SEQ ID NO 134	CGCCCGATC
MY821. txt	SEQ ID NO 135	CGCCCGATC
MY824. txt	SEQ ID NO 136	CGCCCGATC
MY102. txt	SEQ ID NO 137	CGCCCGATC
MY105. txt	SEQ ID NO 138	CGCCCGATC
MY251. txt	SEQ ID NO 139	CGCCCGATC
MY256. txt	SEQ ID NO 140	CGCCCGATC
MY294. txt	SEQ ID NO 141	CGCCCGATC
MY354. txt	SEQ ID NO 142	CGCCCGATC
Atcc7-seq. txt	SEQ ID NO 143	CGCCCGATC
Atcc7-seq. txt	SEQ ID NO 144	CGCCCGATC
MY121. txt	SEQ ID NO 145	CGCCCGATC
MY249. txt	SEQ ID NO 146	CGCCCGATC
MY372. txt	SEQ ID NO 147	CGCCCGATC
MY378. txt	SEQ ID NO 148	CGCCCGATC
MY488. txt	SEQ ID NO 149	CGCCCGATC
MY556. txt	SEQ ID NO 150	CGCCCGATC
MY563. txt	SEQ ID NO 151	CGCCCGATC
MY586. txt	SEQ ID NO 152	CGCCCGATC
Atcc8-seq. txt	SEQ ID NO 153	CGCCCGATC
M35. txt	SEQ ID NO 154	CGCCCGATC
M36. txt	SEQ ID NO 155	CGCCCGATC
M37. txt	SEQ ID NO 156	CGCCCGATC
m125. txt	SEQ ID NO 157	CGCCCGATC
MY143. txt	SEQ ID NO 158	CGCCCGATC
MY104. txt	SEQ ID NO 159	CGCCCGATC
MY196. txt	SEQ ID NO 160	CGCCCGATC
MY357. txt	SEQ ID NO 161	CGCCCGATC
MY358. txt	SEQ ID NO 162	CGCCCGATC
MY480. txt	SEQ ID NO 163	CGCCCGATC
MY212. txt	SEQ ID NO 164	CGCCCGATC
MY491. txt	SEQ ID NO 165	CGCCCGATC
MY497. txt	SEQ ID NO 166	CGCCCGATC
MY816. txt	SEQ ID NO 167	CGCCCGATC
Atcc10-seq. txt	SEQ ID NO 168	CGCCCGATC



Table 1  
BASE NOS 421-480

M38.txt	SEQ ID NO 168	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M39.txt	SEQ ID NO 170	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M40.txt	SEQ ID NO 171	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M41.txt	SEQ ID NO 172	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M42.txt	SEQ ID NO 173	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M43.txt	SEQ ID NO 174	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M44.txt	SEQ ID NO 175	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M45.txt	SEQ ID NO 176	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M46.txt	SEQ ID NO 177	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M47.txt	SEQ ID NO 178	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M68(Mav6).txt	SEQ ID NO 179	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M89.txt	SEQ ID NO 180	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC
M66(Mav4).txt	SEQ ID NO 181	CGCCGATC	GA	GGG	CGCTTC	CGAGCCGCCG	GTGCTGGT	GC

Table 1  
BASE NOS 481-540

ATCC9-Mcb.txt	SEQ ID NO 1	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
MY621.txt	SEQ ID NO 2	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
Atcc1-av.txt	SEQ ID NO 3	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M29.txt	SEQ ID NO 4	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M30.txt	SEQ ID NO 5	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M31.txt	SEQ ID NO 6	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M32.txt	SEQ ID NO 7	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M33.txt	SEQ ID NO 8	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M34.txt	SEQ ID NO 9	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M48-new.txt	SEQ ID NO 10	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M49.txt	SEQ ID NO 11	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M64(Mav2).txt	SEQ ID NO 12	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M65(Mav3).txt	SEQ ID NO 13	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M67(Mav5).txt	SEQ ID NO 14	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M69(Mav7).txt	SEQ ID NO 15	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M71(Mav9).txt	SEQ ID NO 16	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M91.txt	SEQ ID NO 17	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M94.txt	SEQ ID NO 18	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M95.txt	SEQ ID NO 19	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M96.txt	SEQ ID NO 20	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M100.txt	SEQ ID NO 21	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M101.txt	SEQ ID NO 22	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M102.txt	SEQ ID NO 23	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M104.txt	SEQ ID NO 24	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M105.txt	SEQ ID NO 25	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M106.txt	SEQ ID NO 26	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M111.txt	SEQ ID NO 27	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M176.txt	SEQ ID NO 28	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M1451.txt	SEQ ID NO 29	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
AtCC2-chelnew.txt	SEQ ID NO 30	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M10.txt	SEQ ID NO 31	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M11-662.txt	SEQ ID NO 32	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M12.txt	SEQ ID NO 33	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M13 2_662.txt	SEQ ID NO 34	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M14.txt	SEQ ID NO 35	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M15.txt	SEQ ID NO 36	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M16.txt	SEQ ID NO 37	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M17 2_662.txt	SEQ ID NO 38	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M50.txt	SEQ ID NO 39	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M51.txt	SEQ ID NO 40	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M115.txt	SEQ ID NO 41	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M116.txt	SEQ ID NO 42	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M119.txt	SEQ ID NO 43	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
MY109.txt	SEQ ID NO 44	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
MY200.txt	SEQ ID NO 45	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
MY207.txt	SEQ ID NO 46	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
MY209.txt	SEQ ID NO 47	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M122.txt	SEQ ID NO 48	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M123.txt	SEQ ID NO 49	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M124.txt	SEQ ID NO 50	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
Atcc3-for.txt	SEQ ID NO 51	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M53.txt	SEQ ID NO 52	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M54.txt	SEQ ID NO 53	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M55.txt	SEQ ID NO 54	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M56.txt	SEQ ID NO 55	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT
M74 (Mav12).txt	SEQ ID NO 56	GCCGCAAGGCGGCGGAGGTGGAGTACGTGGCCCTCGTCTGAGGGTGGAGCTACATGGACGCTCT

**BASE NOS 481-540**

M77.txt	SEQ ID NO 57
M78.txt	SEQ ID NO 58
M721.txt	SEQ ID NO 59
MY223.txt	SEQ ID NO 60
MY225.txt	SEQ ID NO 61
MY331.txt	SEQ ID NO 62
MY715.txt	SEQ ID NO 63
MY470.txt	SEQ ID NO 64
ATCC4-0-Gord.txt	SEQ ID NO 65
H78(1x).txt	SEQ ID NO 66
H79(jd).txt	SEQ ID NO 67
M80(lg).txt	SEQ ID NO 68
M81(1l).txt	SEQ ID NO 69
M82(rn).txt	SEQ ID NO 70
M83(mb).txt	SEQ ID NO 71
M84(ow).txt	SEQ ID NO 72
M85(1b).txt	SEQ ID NO 73
M86(rb).txt	SEQ ID NO 74
M87(wi).txt	SEQ ID NO 75
M90(gordp).txt	SEQ ID NO 76
M126.txt	SEQ ID NO 77
M128.txt	SEQ ID NO 78
My103.txt	SEQ ID NO 79
MY475.txt	SEQ ID NO 80
MY476.txt	SEQ ID NO 81
MY930.txt	SEQ ID NO 82
ATCC5-Int.txt	SEQ ID NO 83
ATCC5-0Int.txt	SEQ ID NO 84
M18.txt	SEQ ID NO 85
M19.txt	SEQ ID NO 86
M20.txt	SEQ ID NO 87
M21.txt	SEQ ID NO 88
M22.txt	SEQ ID NO 89
M23.txt	SEQ ID NO 90
M24.txt	SEQ ID NO 91
M25.txt	SEQ ID NO 92
M26.txt	SEQ ID NO 93
M27.txt	SEQ ID NO 94
M28.txt	SEQ ID NO 95
MY107.txt	SEQ ID NO 96
MY107.txt	SEQ ID NO 97
MY112.txt	SEQ ID NO 98
MY312.txt	SEQ ID NO 99
ATCC6-Kan.txt	SEQ ID NO 100
M1.txt	SEQ ID NO 101
M2.txt	SEQ ID NO 102
M3.txt	SEQ ID NO 103
M4.txt	SEQ ID NO 104
M5.txt	SEQ ID NO 105
M6.txt	SEQ ID NO 106
M7.txt	SEQ ID NO 107
M9.txt	SEQ ID NO 108
M57.txt	SEQ ID NO 109
M58.txt	SEQ ID NO 110
M59.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

[illegible]

## Table 1

SEQID.NO.113	My60.txt
SEQID.NO.114	My61.txt
SEQID.NO.115	My62.txt
SEQID.NO.116	My106.txt
SEQID.NO.117	My216.txt
SEQID.NO.118	My218.txt
SEQID.NO.119	My226.txt
SEQID.NO.120	My109.txt
SEQID.NO.121	My111.txt
SEQID.NO.122	My112.txt
SEQID.NO.123	My113.txt
SEQID.NO.124	My114.txt
SEQID.NO.125	My325.txt
SEQID.NO.126	My1718.txt
SEQID.NO.127	My214.txt
SEQID.NO.128	My224.txt
SEQID.NO.129	My244.txt
SEQID.NO.130	My339.txt
SEQID.NO.131	My343.txt
SEQID.NO.132	My458.txt
SEQID.NO.133	My809.txt
SEQID.NO.134	My817.txt
SEQID.NO.135	My821.txt
SEQID.NO.136	My824.txt
SEQID.NO.137	My102.txt
SEQID.NO.138	My105.txt
SEQID.NO.139	My251.txt
SEQID.NO.140	My256.txt
SEQID.NO.141	My294.txt
SEQID.NO.142	My354.txt
SEQID.NO.143	Atcc7-scr.txt
SEQID.NO.144	Atcc7-0scr.txt
SEQID.NO.145	My121.txt
SEQID.NO.146	My249.txt
SEQID.NO.147	My372.txt
SEQID.NO.148	My378.txt
SEQID.NO.149	My484.txt
SEQID.NO.150	My556.txt
SEQID.NO.151	My563.txt
SEQID.NO.152	My586.txt
SEQID.NO.153	Atcc8-ase.txt
SEQID.NO.154	My35.txt
SEQID.NO.155	My36.txt
SEQID.NO.156	My37.txt
SEQID.NO.157	My125.txt
SEQID.NO.158	My143.txt
SEQID.NO.159	My104.txt
SEQID.NO.160	My196.txt
SEQID.NO.161	My357.txt
SEQID.NO.162	My358.txt
SEQID.NO.163	My480.txt
SEQID.NO.164	My212.txt
SEQID.NO.165	My491.txt
SEQID.NO.166	My497.txt
SEQID.NO.167	My816.txt
SEQID.NO.168	Atcc10-xep.txt

## Table 1

SEQ ID NO 160	M38. txt
SEQ ID NO 170	M39. txt
SEQ ID NO 171	M40. txt
SEQ ID NO 172	M41. txt
SEQ ID NO 173	M42. txt
SEQ ID NO 174	M43. txt
SEQ ID NO 175	M44. txt
SEQ ID NO 176	M45. txt
SEQ ID NO 177	M46. txt
SEQ ID NO 178	M47. txt
SEQ ID NO 179	M48 (May6). txt
SEQ ID NO 180	M49. txt
SEQ ID NO 181	M56 (May4). txt

## Table 1

SEQ ID NO 1	ATCC9-Mtb.txt
SEQ ID NO 2	MT621.txt
SEQ ID NO 3	ATcc1-av.txt
SEQ ID NO 4	MT29.txt
SEQ ID NO 5	M30.txt
SEQ ID NO 6	M31.txt
SEQ ID NO 7	M32.txt
SEQ ID NO 8	M33.txt
SEQ ID NO 9	M34.txt
SEQ ID NO 10	M48-new.txt
SEQ ID NO 11	M49.txt
SEQ ID NO 12	M46 (Mav2).txt
SEQ ID NO 13	M45 (Mav3).txt
SEQ ID NO 14	M47 (Mav5).txt
SEQ ID NO 15	M49 (Mav7).txt
SEQ ID NO 16	M71 (Mav9).txt
SEQ ID NO 17	M91.txt
SEQ ID NO 18	M94.txt
SEQ ID NO 19	M95.txt
SEQ ID NO 20	M96.txt
SEQ ID NO 21	M100.txt
SEQ ID NO 22	M101.txt
SEQ ID NO 23	M102.txt
SEQ ID NO 24	M104.txt
SEQ ID NO 25	M105.txt
SEQ ID NO 26	M106.txt
SEQ ID NO 27	M111.txt
SEQ ID NO 28	M76.txt
SEQ ID NO 29	MT451.txt
SEQ ID NO 30	ATCC2-chainew.txt
SEQ ID NO 31	M10.txt
SEQ ID NO 32	M11-662.txt
SEQ ID NO 33	M12.txt
SEQ ID NO 34	M13 2_662.txt
SEQ ID NO 35	M14.txt
SEQ ID NO 36	M15.txt
SEQ ID NO 37	M16.txt
SEQ ID NO 38	M17 2_662.txt
SEQ ID NO 39	M50.txt
SEQ ID NO 40	M51.txt
SEQ ID NO 41	M115.txt
SEQ ID NO 42	M116.txt
SEQ ID NO 43	M119.txt
SEQ ID NO 44	MT109.txt
SEQ ID NO 45	MT200.txt
SEQ ID NO 46	MT207.txt
SEQ ID NO 47	MT209.txt
SEQ ID NO 48	M122.txt
SEQ ID NO 49	M123.txt
SEQ ID NO 50	M124.txt
SEQ ID NO 51	ATcc3-fos.txt
SEQ ID NO 52	M53.txt
SEQ ID NO 53	M54.txt
SEQ ID NO 54	M55.txt
SEQ ID NO 55	M56.txt
SEQ ID NO 56	M74 (Mav12).txt

## Table 1

M77.txt	SEQ ID NO 57
M110.txt	SEQ ID NO 58
MY221.txt	SEQ ID NO 59
MY223.txt	SEQ ID NO 60
MY225.txt	SEQ ID NO 61
MY341.txt	SEQ ID NO 62
MY715.txt	SEQ ID NO 63
MY470.txt	SEQ ID NO 64
ATCC4-go.txt	SEQ ID NO 65
ATCC4-0-Gord.txt	SEQ ID NO 66
M78(1z).txt	SEQ ID NO 67
M79(jd).txt	SEQ ID NO 68
M80(lg).txt	SEQ ID NO 69
M81(1l).txt	SEQ ID NO 70
M82(lrm).txt	SEQ ID NO 71
M83(mb).txt	SEQ ID NO 72
M84(ow).txt	SEQ ID NO 73
M85(1b).txt	SEQ ID NO 74
M86(xb).txt	SEQ ID NO 75
M87(wr).txt	SEQ ID NO 76
M90(gorADB).txt	SEQ ID NO 77
m126.txt	SEQ ID NO 78
M128.txt	SEQ ID NO 79
MY103.txt	SEQ ID NO 80
MY475.txt	SEQ ID NO 81
MY476.txt	SEQ ID NO 82
MY830.txt	SEQ ID NO 83
ATCC5-int.txt	SEQ ID NO 84
ATCC5-0int.txt	SEQ ID NO 85
M18.txt	SEQ ID NO 86
M19.txt	SEQ ID NO 87
M20.txt	SEQ ID NO 88
M21.txt	SEQ ID NO 89
M22.txt	SEQ ID NO 90
M23.txt	SEQ ID NO 91
M24.txt	SEQ ID NO 92
M25.txt	SEQ ID NO 93
M26.txt	SEQ ID NO 94
M27.txt	SEQ ID NO 95
M28.txt	SEQ ID NO 96
M107.txt	SEQ ID NO 97
MY107.txt	SEQ ID NO 98
MY112.txt	SEQ ID NO 99
MY312.txt	SEQ ID NO 100
ATCC6-kan.txt	SEQ ID NO 101
ATCC6-0kan.txt	SEQ ID NO 102
M1.txt	SEQ ID NO 103
M2.txt	SEQ ID NO 104
M3.txt	SEQ ID NO 105
M4.txt	SEQ ID NO 106
M6.txt	SEQ ID NO 107
M7.txt	SEQ ID NO 108
M9.txt	SEQ ID NO 109
M57.txt	SEQ ID NO 110
M58.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

[illegible]

## Table 1

M60.txt	SEQ ID NO 111
M61.txt	SEQ ID NO 114
M62.txt	SEQ ID NO 115
MY106.txt	SEQ ID NO 116
MY216.txt	SEQ ID NO 117
MY218.txt	SEQ ID NO 118
MY226.txt	SEQ ID NO 119
MI09.txt	SEQ ID NO 120
MI11.txt	SEQ ID NO 121
MI12.txt	SEQ ID NO 122
MI13.txt	SEQ ID NO 123
MI14.txt	SEQ ID NO 124
MY325.txt	SEQ ID NO 125
MY718.txt	SEQ ID NO 126
MY214.txt	SEQ ID NO 127
MY224.txt	SEQ ID NO 128
MY244.txt	SEQ ID NO 129
MY339.txt	SEQ ID NO 130
MY343.txt	SEQ ID NO 131
MY458.txt	SEQ ID NO 132
MY809.txt	SEQ ID NO 133
MY817.txt	SEQ ID NO 134
MY821.txt	SEQ ID NO 135
MY824.txt	SEQ ID NO 136
MY102.txt	SEQ ID NO 137
MY105.txt	SEQ ID NO 138
MY251.txt	SEQ ID NO 139
MY256.txt	SEQ ID NO 140
MY294.txt	SEQ ID NO 141
MY354.txt	SEQ ID NO 142
Atcc7-scr.txt	SEQ ID NO 143
ATCC7-0scr.txt	SEQ ID NO 144
MY121.txt	SEQ ID NO 145
MY249.txt	SEQ ID NO 146
MY372.txt	SEQ ID NO 147
MY378.txt	SEQ ID NO 148
MY484.txt	SEQ ID NO 149
MY556.txt	SEQ ID NO 150
MY563.txt	SEQ ID NO 151
MY586.txt	SEQ ID NO 152
Atcc8-smo.txt	SEQ ID NO 153
M35.txt	SEQ ID NO 154
M36.txt	SEQ ID NO 155
M37.txt	SEQ ID NO 156
m125.txt	SEQ ID NO 157
MY143.txt	SEQ ID NO 158
MY104.txt	SEQ ID NO 159
MY196.txt	SEQ ID NO 160
MY357.txt	SEQ ID NO 161
MY358.txt	SEQ ID NO 162
MY480.txt	SEQ ID NO 163
MY212.txt	SEQ ID NO 164
MY491.txt	SEQ ID NO 165
MY497.txt	SEQ ID NO 166
MY816.txt	SEQ ID NO 167
Atcc10-xep.txt	SEQ ID NO 168



**BASE NOS 541-600**

[illegible]

M39. txt	SEQ ID NO 160
M39. txt	SEQ ID NO 170
M40. txt	SEQ ID NO 171
M41. txt	SEQ ID NO 172
M42. txt	SEQ ID NO 173
M43. txt	SEQ ID NO 174
M44. txt	SEQ ID NO 175
M45. txt	SEQ ID NO 176
M46. txt	SEQ ID NO 177
M47. txt	SEQ ID NO 178
M68(Mav6). txt	SEQ ID NO 179
M89. txt	SEQ ID NO 180
M65(Mav4). txt	SEQ ID NO 181

## Table 1

SEQ ID NO 1	ATCC9-Mub.txt	SEQ ID NO 1
MY621.txt		SEQ ID NO 2
Atcc1-av.txt		SEQ ID NO 3
M29.txt		SEQ ID NO 4
M30.txt		SEQ ID NO 5
M31.txt		SEQ ID NO 6
M32.txt		SEQ ID NO 7
M33.txt		SEQ ID NO 8
M34.txt		SEQ ID NO 9
M48-new.txt		SEQ ID NO 10
M49.txt		SEQ ID NO 11
M64 (May2).txt		SEQ ID NO 12
M65 (May3).txt		SEQ ID NO 13
M67 (May5).txt		SEQ ID NO 14
M69 (May7).txt		SEQ ID NO 15
M71 (May9).txt		SEQ ID NO 16
M91.txt		SEQ ID NO 17
M94.txt		SEQ ID NO 18
M95.txt		SEQ ID NO 19
M96.txt		SEQ ID NO 20
M100.txt		SEQ ID NO 21
M101.txt		SEQ ID NO 22
M102.txt		SEQ ID NO 23
M104.txt		SEQ ID NO 24
M105.txt		SEQ ID NO 25
M106.txt		SEQ ID NO 26
M111.txt		SEQ ID NO 27
M76.txt		SEQ ID NO 28
MY451.txt		SEQ ID NO 29
ATCC2-cholenew.txt		SEQ ID NO 30
M10.txt		SEQ ID NO 31
M11-662.txt		SEQ ID NO 32
M12.txt		SEQ ID NO 33
M13-2_662.txt		SEQ ID NO 34
M14.txt		SEQ ID NO 35
M15.txt		SEQ ID NO 36
M16.txt		SEQ ID NO 37
M17-2_662.txt		SEQ ID NO 38
M50.txt		SEQ ID NO 39
M51.txt		SEQ ID NO 40
M115.txt		SEQ ID NO 41
M116.txt		SEQ ID NO 42
M119.txt		SEQ ID NO 43
MY109.txt		SEQ ID NO 44
MY200.txt		SEQ ID NO 45
MY207.txt		SEQ ID NO 46
MY209.txt		SEQ ID NO 47
M122.txt		SEQ ID NO 48
M123.txt		SEQ ID NO 49
M124.txt		SEQ ID NO 50
Atcc3-for.txt		SEQ ID NO 51
M53.txt		SEQ ID NO 52
M54.txt		SEQ ID NO 53
M55.txt		SEQ ID NO 54
M56.txt		SEQ ID NO 55
M74 (May12).txt		SEQ ID NO 56

# Table 1

M77.txt	SEQ ID NO 57
M116.txt	SEQ ID NO 58
MY221.txt	SEQ ID NO 59
MY223.txt	SEQ ID NO 60
MY225.txt	SEQ ID NO 61
MY341.txt	SEQ ID NO 62
MY715.txt	SEQ ID NO 63
MY470.txt	SEQ ID NO 64
ATCC4-go.txt	SEQ ID NO 65
ATCC4-0-Gord.txt	SEQ ID NO 66
MY78(1x).txt	SEQ ID NO 67
MY79(jd).txt	SEQ ID NO 68
M80(lg).txt	SEQ ID NO 69
M81(1l).txt	SEQ ID NO 70
M82(1m).txt	SEQ ID NO 71
M83(mb).txt	SEQ ID NO 72
M84(ow).txt	SEQ ID NO 73
M85(1b).txt	SEQ ID NO 74
M86(eb).txt	SEQ ID NO 75
M87(wm).txt	SEQ ID NO 76
MY90(gordDB).txt	SEQ ID NO 77
m126.txt	SEQ ID NO 78
MY108.txt	SEQ ID NO 79
MY103.txt	SEQ ID NO 80
MY475.txt	SEQ ID NO 81
MY476.txt	SEQ ID NO 82
MY930.txt	SEQ ID NO 83
ATCC5-Int.txt	SEQ ID NO 84
ATCC5-0Int.txt	SEQ ID NO 85
M10.txt	SEQ ID NO 86
M19.txt	SEQ ID NO 87
M20.txt	SEQ ID NO 88
M21.txt	SEQ ID NO 89
M22.txt	SEQ ID NO 90
M23.txt	SEQ ID NO 91
M24.txt	SEQ ID NO 92
M25.txt	SEQ ID NO 93
M26.txt	SEQ ID NO 94
M27.txt	SEQ ID NO 95
M28.txt	SEQ ID NO 96
MY107.txt	SEQ ID NO 97
MY107.txt	SEQ ID NO 98
MY112.txt	SEQ ID NO 99
MY312.txt	SEQ ID NO 100
ATCC6-kan.txt	SEQ ID NO 101
ATCC6-0Kan.txt	SEQ ID NO 102
M1.txt	SEQ ID NO 103
M2.txt	SEQ ID NO 104
M3.txt	SEQ ID NO 105
M4.txt	SEQ ID NO 106
M6.txt	SEQ ID NO 107
M7.txt	SEQ ID NO 108
M9.txt	SEQ ID NO 109
M57.txt	SEQ ID NO 110
M58.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

[illegible]

**BASE NOS 600-660**

SEQ ID NO 113	M60.txt
SEQ ID NO 114	M61.txt
SEQ ID NO 115	M62.txt
SEQ ID NO 116	MT106.txt
SEQ ID NO 117	MT216.txt
SEQ ID NO 118	MT218.txt
SEQ ID NO 119	MT226.txt
SEQ ID NO 120	M109.txt
SEQ ID NO 121	M111.txt
SEQ ID NO 122	M112.txt
SEQ ID NO 123	M113.txt
SEQ ID NO 124	M114.txt
SEQ ID NO 125	MY325.txt
SEQ ID NO 126	MY718.txt
SEQ ID NO 127	MY214.txt
SEQ ID NO 128	MY224.txt
SEQ ID NO 129	MY244.txt
SEQ ID NO 130	MY339.txt
SEQ ID NO 131	MY343.txt
SEQ ID NO 132	MY458.txt
SEQ ID NO 133	MY459.txt
SEQ ID NO 134	MY817.txt
SEQ ID NO 135	MY821.txt
SEQ ID NO 136	MY824.txt
SEQ ID NO 137	MY102.txt
SEQ ID NO 138	MY105.txt
SEQ ID NO 139	MY251.txt
SEQ ID NO 140	MY256.txt
SEQ ID NO 141	MY294.txt
SEQ ID NO 142	MY354.txt
SEQ ID NO 143	ATcc7-accr.txt
SEQ ID NO 144	TCC7-Oscr.txt
SEQ ID NO 145	MY121.txt
SEQ ID NO 146	MY249.txt
SEQ ID NO 147	MY372.txt
SEQ ID NO 148	MY378.txt
SEQ ID NO 149	MY484.txt
SEQ ID NO 150	MY556.txt
SEQ ID NO 151	MY563.txt
SEQ ID NO 152	MY586.txt
SEQ ID NO 153	Atcc8-mmo.txt
SEQ ID NO 154	MY35.ttxt
SEQ ID NO 155	MY36.txt
SEQ ID NO 156	MY37.txt
SEQ ID NO 157	mi25.txt
SEQ ID NO 158	MY143.txt
SEQ ID NO 159	MY104.txt
SEQ ID NO 160	MY196.txt
SEQ ID NO 161	MY357.txt
SEQ ID NO 162	MY358.txt
SEQ ID NO 163	MY480.txt
SEQ ID NO 164	MY212.txt
SEQ ID NO 165	MY491.txt
SEQ ID NO 166	MY497.txt
SEQ ID NO 167	MY816.txt
SEQ ID NO 168	atcc10-xop.txt
SEQ ID NO 169	

Table 1  
BASE NOS 600-660

M38 .txt	SEQ ID NO 169	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M39 .txt	SEQ ID NO 170	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M40 .txt	SEQ ID NO 171	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M41 .txt	SEQ ID NO 172	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M42 .txt	SEQ ID NO 173	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M43 .txt	SEQ ID NO 174	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M44 .txt	SEQ ID NO 175	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M45 .txt	SEQ ID NO 176	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M46 .txt	SEQ ID NO 177	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M47 .txt	SEQ ID NO 178	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M48 (Mav6) .txt	SEQ ID NO 179	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M49 .txt	SEQ ID NO 180	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG
M55 (Mav4) .txt	SEQ ID NO 181	CGAACCGG	GC	ATGGG	GC	AACATGCAGCGGCCAAGGC	GT	CCG	TGGT	CGT	AGCG

## Table 1

SEQ ID NO1	ATCC9-Mtb.txt	SEQ ID NO1
SEQ ID NO2	MY621.txt	SEQ ID NO2
SEQ ID NO3	Atcc1-av.txt	SEQ ID NO3
SEQ ID NO4	M29.txt	SEQ ID NO4
SEQ ID NO5	M30.txt	SEQ ID NO5
SEQ ID NO6	M31.txt	SEQ ID NO6
SEQ ID NO7	M32.txt	SEQ ID NO7
SEQ ID NO8	M33.txt	SEQ ID NO8
SEQ ID NO9	M34.txt	SEQ ID NO9
SEQ ID NO10	M48-new.txt	SEQ ID NO10
SEQ ID NO11	M49.txt	SEQ ID NO11
SEQ ID NO12	M64 (May2).txt	SEQ ID NO12
SEQ ID NO13	M65 (May3).txt	SEQ ID NO13
SEQ ID NO14	M67 (May5).txt	SEQ ID NO14
SEQ ID NO15	M68 (May7).txt	SEQ ID NO15
SEQ ID NO16	M71 (May9).txt	SEQ ID NO16
SEQ ID NO17	M51.txt	SEQ ID NO17
SEQ ID NO18	MY94.txt	SEQ ID NO18
SEQ ID NO19	MY95.txt	SEQ ID NO19
SEQ ID NO20	MY96.txt	SEQ ID NO20
SEQ ID NO21	MY100.txt	SEQ ID NO21
SEQ ID NO22	MY101.txt	SEQ ID NO22
SEQ ID NO23	MY102.txt	SEQ ID NO23
SEQ ID NO24	MY104.txt	SEQ ID NO24
SEQ ID NO25	MY105.txt	SEQ ID NO25
SEQ ID NO26	MY106.txt	SEQ ID NO26
SEQ ID NO27	MY111.txt	SEQ ID NO27
SEQ ID NO28	MY451.txt	SEQ ID NO28
SEQ ID NO29	ATCC3-cholesterol.txt	SEQ ID NO29
SEQ ID NO30	MY10.txt	SEQ ID NO30
SEQ ID NO31	MY11-662.txt	SEQ ID NO31
SEQ ID NO32	MY12.txt	SEQ ID NO32
SEQ ID NO33	MY13 2 662.txt	SEQ ID NO33
SEQ ID NO34	MY14.txt	SEQ ID NO34
SEQ ID NO35	MY15.txt	SEQ ID NO35
SEQ ID NO36	MY16.txt	SEQ ID NO36
SEQ ID NO37	MY109.txt	SEQ ID NO37
SEQ ID NO38	MY200.txt	SEQ ID NO38
SEQ ID NO39	MY207.txt	SEQ ID NO39
SEQ ID NO40	MY209.txt	SEQ ID NO40
SEQ ID NO41	MY501.txt	SEQ ID NO41
SEQ ID NO42	MY51.txt	SEQ ID NO42
SEQ ID NO43	MY115.txt	SEQ ID NO43
SEQ ID NO44	MY116.txt	SEQ ID NO44
SEQ ID NO45	MY119.txt	SEQ ID NO45
SEQ ID NO46	MY120.txt	SEQ ID NO46
SEQ ID NO47	MY207.txt	SEQ ID NO47
SEQ ID NO48	MY209.txt	SEQ ID NO48
SEQ ID NO49	MY122.txt	SEQ ID NO49
SEQ ID NO50	MY123.txt	SEQ ID NO50
SEQ ID NO51	MY124.txt	SEQ ID NO51
SEQ ID NO52	Atcc3-for.txt	SEQ ID NO52
SEQ ID NO53	MY3.txt	SEQ ID NO53
SEQ ID NO54	MY4.txt	SEQ ID NO54
SEQ ID NO55	MY5.txt	SEQ ID NO55
SEQ ID NO56	MY6.txt	SEQ ID NO56
SEQ ID NO57	MY121.txt	SEQ ID NO57

## Table 1

M77.txt	SEQ ID NO 57
M118.txt	SEQ ID NO 58
MY221.txt	SEQ ID NO 59
MY223.txt	SEQ ID NO 60
MY225.txt	SEQ ID NO 61
MY311.txt	SEQ ID NO 62
MY715.txt	SEQ ID NO 63
MY470.txt	SEQ ID NO 64
ATCC4-go.txt	SEQ ID NO 65
ATCC4-0-Gord.txt	SEQ ID NO 66
M78(1st).txt	SEQ ID NO 67
M79(jd).txt	SEQ ID NO 68
M80(lg).txt	SEQ ID NO 69
M81(1l).txt	SEQ ID NO 70
M82(rw).txt	SEQ ID NO 71
M83(ab).txt	SEQ ID NO 72
M84(ow).txt	SEQ ID NO 73
M85(lb).txt	SEQ ID NO 74
M86(rb).txt	SEQ ID NO 75
M87(wr).txt	SEQ ID NO 76
M90(gordDB).txt	SEQ ID NO 77
m126.txt	SEQ ID NO 78
M128.txt	SEQ ID NO 79
MY103.txt	SEQ ID NO 80
MY475.txt	SEQ ID NO 81
MY476.txt	SEQ ID NO 82
MY030.txt	SEQ ID NO 83
ATcc5-Int.txt	SEQ ID NO 84
ATCC5-0Int.txt	SEQ ID NO 85
M18.txt	SEQ ID NO 86
M19.txt	SEQ ID NO 87
M20.txt	SEQ ID NO 88
M21.txt	SEQ ID NO 89
M22.txt	SEQ ID NO 90
M23.txt	SEQ ID NO 91
M24.txt	SEQ ID NO 92
M25.txt	SEQ ID NO 93
M26.txt	SEQ ID NO 94
M27.txt	SEQ ID NO 95
M28.txt	SEQ ID NO 96
M107.txt	SEQ ID NO 97
MY107.txt	SEQ ID NO 98
MY112.txt	SEQ ID NO 99
MY312.txt	SEQ ID NO 100
Atcc6-kan.txt	SEQ ID NO 101
ATCC6-0Kan.txt	SEQ ID NO 102
M1.txt	SEQ ID NO 103
M2.txt	SEQ ID NO 104
M3.txt	SEQ ID NO 105
M4.txt	SEQ ID NO 106
M6.txt	SEQ ID NO 107
M7.txt	SEQ ID NO 108
M9.txt	SEQ ID NO 109
M57.txt	SEQ ID NO 110
M59.txt	SEQ ID NO 111
M59.txt	SEQ ID NO 112

## Table 1

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SEQ ID NO 111      M60.  .txt
SEQ ID NO 114      M61.  .txt
SEQ ID NO 116      M62.  .txt
SEQ ID NO 117      MY106. .txt
SEQ ID NO 118      MY216. .txt
SEQ ID NO 119      MY218. .txt
SEQ ID NO 120      MY226. .txt
SEQ ID NO 121      M109.  .txt
SEQ ID NO 122      M111.  .txt
SEQ ID NO 123      M112.  .txt
SEQ ID NO 124      M113.  .txt
SEQ ID NO 125      M114.  .txt
SEQ ID NO 126      MY735. .txt
SEQ ID NO 127      MY718. .txt
SEQ ID NO 128      MY214. .txt
SEQ ID NO 129      MY722A. .txt
SEQ ID NO 130      MY724A. .txt
SEQ ID NO 131      MY339. .txt
SEQ ID NO 132      MY343. .txt
SEQ ID NO 133      MY458. .txt
SEQ ID NO 134      MY7809. .txt
SEQ ID NO 135      MY7817. .txt
SEQ ID NO 136      MY824. .txt
SEQ ID NO 137      MY7102. .txt
SEQ ID NO 138      MY105. .txt
SEQ ID NO 139      MY251. .txt
SEQ ID NO 140      MY256. .txt
SEQ ID NO 141      MY294. .txt
SEQ ID NO 142      MY354. .txt
SEQ ID NO 143      ATCC7-secr.txt
SEQ ID NO 144      ATCC7-05cr.txt
SEQ ID NO 145      MY121. .txt
SEQ ID NO 146      MY249. .txt
SEQ ID NO 147      MY372. .txt
SEQ ID NO 148      MY378. .txt
SEQ ID NO 149      MY484. .txt
SEQ ID NO 150      MY556. .txt
SEQ ID NO 151      MY563. .txt
SEQ ID NO 152      MY586. .txt
SEQ ID NO 153      ATcc8-sae.txt
SEQ ID NO 154      M35.   .txt
SEQ ID NO 155      M36.   .txt
SEQ ID NO 156      M37.   .txt
SEQ ID NO 157      m125.  .txt
SEQ ID NO 158      MY143. .txt
SEQ ID NO 159      MY104. .txt
SEQ ID NO 160      MY196. .txt
SEQ ID NO 161      MY357. .txt
SEQ ID NO 162      MY358. .txt
SEQ ID NO 163      MY480. .txt
SEQ ID NO 164      MY212. .txt
SEQ ID NO 165      MY491. .txt
SEQ ID NO 166      MY497. .txt
SEQ ID NO 167      MY816. .txt
SEQ ID NO 168      seq10 - exp. txt

```



# Table 1

BASE NOS 660-720

M38.txt	SEQ ID NO 169	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGATCGACGCGGCGGACGT	670
M39.txt	SEQ ID NO 170	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	680
M40.txt	SEQ ID NO 171	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	690
M41.txt	SEQ ID NO 172	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	700
M42.txt	SEQ ID NO 173	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	710
M43.txt	SEQ ID NO 174	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	720
M44.txt	SEQ ID NO 175	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M45.txt	SEQ ID NO 176	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M46.txt	SEQ ID NO 177	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M47.txt	SEQ ID NO 178	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M48 (May6).txt	SEQ ID NO 179	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M49.txt	SEQ ID NO 180	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	
M56 (May4).txt	SEQ ID NO 181	AGGC	CCGCTGGTGGGCA	CCGGGATGGA	TGCGCGCGCGCGCGATCGACGCGGCGGACGT	